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ABSTRACT

A conference was held to develop a plan of research into rural education in Australia and to form a consortium of rural education researchers. Part I of this proceedings contains an introductory paper, "Rural Education: The State of the Art" (Steve Clark), which analyzes research in rural education in Australia in recent decades with regard to four themes: schooling (teachers, students, school-community relationships, accommodation); technology; educational delivery (equal opportunity, curriculum, decentralization, service delivery, models); and the dichotomy between education in rural areas and rural education. Part II contains papers or summaries of papers on Australian rural research, criteria for prioritizing research, education of Aborigines and Torres Strait Islanders, education and training needs of rural women and girls, applications of communications technology in education, symbiotic relationships between rural schools and their communities, education in rural Scotland, national assessment of the Country Areas Program, and a model of educational delivery in remote areas. Part III outlines the "think tank" discussion and decision making process; summarizes working groups and plenary sessions; presents reflections of working group members; lists and ranks all research recommendations of the working groups; and lists immediate research priorities in the areas of schooling, community, delivery, technology, and special needs groups. Appendices contain the conference schedule, list of participants, and description of research activities at the University of Western Australia. (SV)

ED 386 364

JAMES COOK UNIVERSITY OF NORTH QUEENSLAND

"THINK TANK" ON RESEARCH INTO RURAL EDUCATION

Edited by M. McSHANE R.S.M. AND J. WALTON

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"THINK TANK" ON RESEARCH INTO RURAL EDUCATION

PROCEEDINGS OF THE CONFERENCE
HELD BY
THE RURAL EDUCATION RESEARCH AND DEVELOPMENT CENTRE
AT
THE SHERATON BREAKWATER CASINO-HOTEL
TOWNSVILLE
JUNE 10-14, 1990

EDITORS: M. MCSHANE R.S.M. AND J. WALTON
RURAL EDUCATION RESEARCH AND DEVELOPMENT CENTRE
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FOREWORD

All of us who have worked on this conference report hope that it presents an accurate record of the three days we spent in Townsville. It might be useful to remind ourselves of the objectives of the 'Think Tank'. An extract from the letter of invitation which was sent to everybody who attended and to those who were unable to attend is quoted below.

> The objects of the 'Think Tank' are:
>
> 1. to provide future directions in research into rural education in Australia;
>
> 2. to develop a forward plan of research;
>
> 3. to form a consortium of researchers into rural education; and
>
> 4. to consider launching a journal of rural education research as the official organ of the consortium if it is formed.
>
> It is hoped that some 'State of the Art' document itemising, with abstracts, some of the major developments in research into rural concerns in Australia will be made available before people gather in Townsville.
>
> In order that the 'Think Tank' is manageable it will not be possible to issue an open invitation to all who may be interested. The proceedings of the 'Think Tank' will be made available and if a consortium is created its membership can be extended beyond those who come to Townsville.

Those who attended the 'Think Tank' will be able to estimate the extent to which the above objectives were achieved.

This conference report is divided into three parts - Part 1 the 'State of the Art' paper prepared by Steve Clark. Part 2, includes the Minister of Education's address and copies of the papers that were presented. Part 3 is more concerned with the conference process and outcomes. Of course there is a strong linkage between all parts.

I should like to take this opportunity of thanking all the people who have contributed to the success of the conference. I am particularly grateful to the Queensland Minister for Education, the Hon. Paul Braddy, who was able to address all conference delegates. I am also grateful to the following: The National Board of Employment, Education & Training for contributing to the cost of producing this conference report, the James Cook University for its contribution to the cost of the Conference dinner, to Telecom for its help preceding and during the Conference, as well as the Townsville City Council, Australian Airlines Ltd, Ansett Airlines of Australia, Dalgety Farmers Ltd., Hannas and Ira Berk (Toowoomba) for their donations to the cost of the Conference and last, but not least, to Sr. Miriam McShane, Ms. Susan Achterberg, the Centre Secretary and to Pearl Logan, David McSwan and Ted Scott, who first mooted the idea of a "Think Tank".

JACK WALTON

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This conference report is dedicated to the memory of Henry Crowther, who was one of the founders of the Rural Education Research & Development Centre, and was greatly concerned for the welfare of country people.

PART I

"THINK TANK" INTRODUCTORY PAPER

STEVE CLARK

RURAL EDUCATION - THE STATE OF THE ART

INTRODUCTION

In the beginning there was quantity. *The Public Schools Act* of 1866 promulgated government concern for the education of all children in New South Wales (Turney, 1980). A century later, and still relevant today, Francis Keppel (1966) named the first revolution in education — the revolution of quantity. 'Everyone was to be provided the chance for an education of some sort' (cited in Darnell, 1981). That revolution, in Australia today, is almost complete. It was typified by the establishment of one teacher schools in the first decades of the twentieth century catering for as few as six pupils in South Australia to at least ten in Queensland and to as many as forty in Western Australia (Browne, 1927).

> *...most of the states expressed a rather complacent pride in the one teacher school ...(which) have made and continue to make an important quantitative contribution to the education of children in remote districts. (Turney, 1980)*

Keppel's (1966) second revolution — equality of opportunity is not only well underway but provides the conditioned stimulus to which Departments of Education and researchers continue to respond. In Australia, historically, that response has been twofold: the consolidation of small schools and the provision of correspondence tuition.

Although New South Wales began to consolidate as early as 1903 the other states were cautious of the costs involved in daily conveyancing (Turney, 1980). By 1930 the movement had gained in acceptance. 'It was based on the conviction that the educational, material and social advantages offered by the consolidated school outweighed the benefits obtainable in the small district school.' (Maclaine, 1973 cited in Turney, 1980)

Correspondence tuition was made available to children who lived in places inaccessible to school facilities. Its introduction is attributed to S.H. Smith who in 1916 began formal and official correspondence education of primary children (Campbell, 1967 cited in Turney, 1980).

> *In countries of the western world the revolution for the concept of equality of opportunity has successfully neared conclusion. Equality of opportunity comes close to being a universally accepted concept, even though definitions may still vary and problems of implementation persist. (Darnell, 1981, p36)*

The next turn of the wheel according to Keppel (1966) would be a revolution in quality. The types of questions asked in education would change from: how many of this do we have or need; to, what do we want schools to do for our children; and, how can we develop their learning? In Australia as in other countries, educational systems, while having mechanisms for collecting and reporting quantitative educational facts, have limited mechanisms to collect information on the quality of their systems (Start, 1978).

This latest revolution can be successful contends Darnell (1981), but only if the principal stakeholders in education agree on the essential purposes of their schools, (Start, 1978) and 'if the means to achieve quality are selected, developed and deployed from the perspective of the people they are intended to serve.' (Darnell, 1981, p36).

THE GENERIC NATURE OF RESEARCH

Keppel's quantity, equality, quality revolutions suggest the generic nature of research into education in rural areas around the globe. The Centre for Educational Research and Innovation (CERI) under the auspices of the Organization for Economic Co-operation and Development commissioned the *Basic Education and Teacher Support in Sparsely - Populated Areas* (SPA) project in 1976. In detailing the international context of the study, Maxwell (1981) wrote that,

> *...there were sufficient common concerns and circumstances to justify the establishment of an international study within OECD auspices and while there were variations around the theme, there were, as well, prevailing trends and forces in OECD countries which prompted the study. (p 20.)*

The universality of the problems encountered when countries attempt to develop an education provision in rural areas, and the type of research undertaken by such countries has been observed in the literature (Meyenn,1985; Darnell,1981; Sher,1981; Nachtigal,1982; Maxwell,1981).

It is the aim of this paper to analyse the research in rural education in Australia in recent decades. Reference is made to research undertaken in other countries where comparisons, differences or explanations are useful in understanding the Australian context. The analytical structure of the review is comprised of eleven descriptor terms which have been grouped into four themes. Each theme represents a collection of common or similar topics which have been extracted from a review of the literature. The review was based on manual searches of the Australian and Canadian Education Indexes in addition to static and on-line computer searches of the ERIC database, British Education Index, Dissertation Abstracts, CAB Abstracts, Psych. Literature database, the European Education Index and Medline. The diagram in Figure 1. below outlines the four themes and their corresponding descriptor terms.

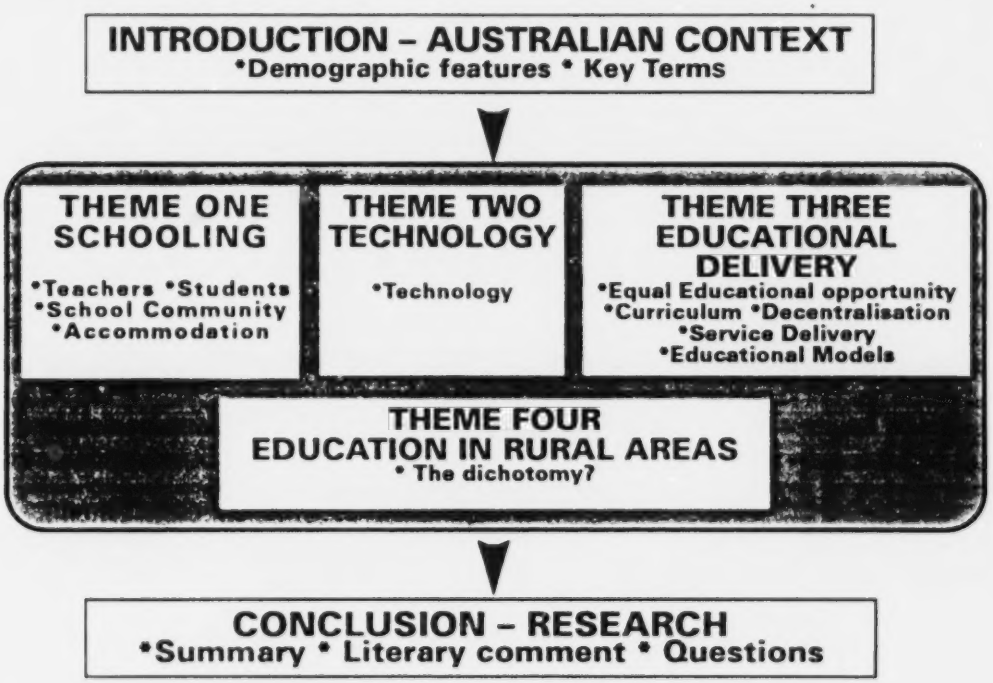

Figure 1 Structure of literature review

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THE AUSTRALIAN CONTEXT

This section is prefaced by a brief overview of the Australian Education System and relevant demographic features

AUSTRALIAN EDUCATION SYSTEM

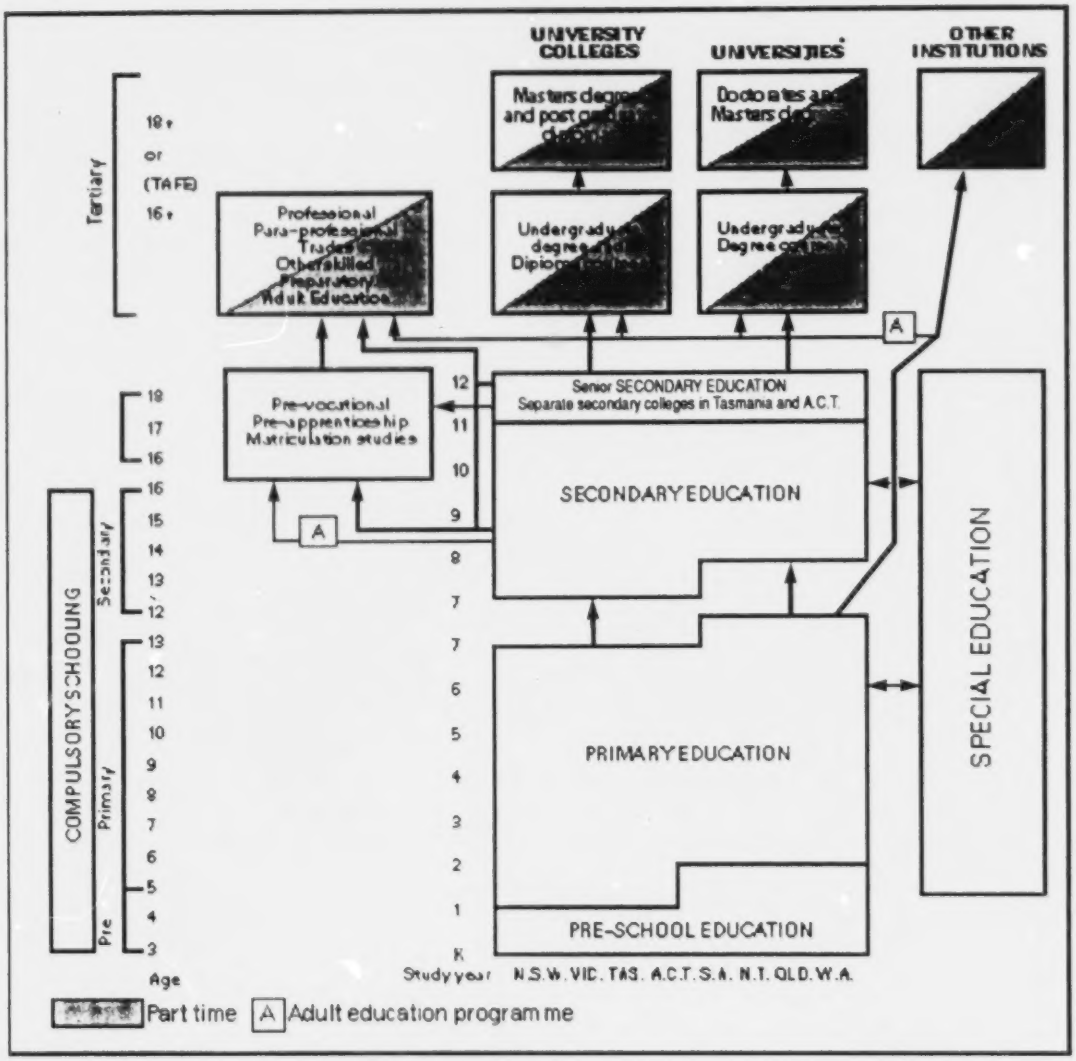

Figure 2 The Australian Education System

This system as outlined in Figure 2. is complex and diverse, consisting of a series of levels that cater for different age groups (The Australian Encyclopaedia, 1988). Schooling is generally compulsory between the ages of six and fifteen years and is centred around Preschool, Primary and Secondary institutions at different grade levels across states (Table 1. - Schooling in Australia, 1989).

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Table 1 Schooling Structure in Australia

	S.A. , N.T.	N.S.W., VIC. TAS. & A.C.T.	QLD. , W.A.
SECONDARY	YEAR 12	YEAR 12	YEAR 12
	YEAR 11	YEAR 11	YEAR 11
	YEAR 10	YEAR 10	YEAR 10
	YEAR 9	YEAR 9	YEAR 9
	YEAR 8	YEAR 8	YEAR 8
PRIMARY	YEAR 7	YEAR 7	YEAR 7
	YEAR 6	YEAR 6	YEAR 6
	YEAR 5	YEAR 5	YEAR 5
	YEAR 4	YEAR 4	YEAR 4
	YEAR 3	YEAR 3	YEAR 3
	YEAR 2	YEAR 2	YEAR 2
	YEAR 1	YEAR 1	YEAR 1
	PRE-YEAR 1	PRE-YEAR 1	

Pre- year is called Reception in S.A.and Transition in N.T.

Pre-Year is called Kindergarten in N.S.W.and A.C.T.and Preparatory in Vic. and Tas.

Most students living in Australia progress through the 'system' of grades by either attending a government or non-government school or by the provision of correspondence lessons through a school for Distance Education. Such schools support rural and isolated families.

Demographic Features

Latest figures available (1987) show that there are 10 000 schools in Australia with a total enrolment of over 3 million students serviced by nearly 200 000 teachers (DEET, 1989). Rural Australia, in 1986, accounted for 5400 schools and catered for 1.2 million students. At that time this represented 39% of total school enrolments (Commonwealth Gov., 1989). [1] In 1987 there were 2823 schools with fewer than 100 students, 45% of which enrolled fewer than 35 students (DEET, 1989). Apart from acknowledging the size of the Australian education system, it is apparent that rural schools represent a significant portion of that system.

[1] Definitions of rural in this context is as provided by CSC, 1987.

Rural - urban population migration occurs on an intra-state and inter-state level. The impact on rural economies and the implications for the provision of education are closely monitored and assessed both by government officials and service organisations. Harrold and Powell's (1987) report to the Commonwealth Schools Commission provides a relevant assessment on the topic,

> *...compared with earlier rural recessions such as that of the 1960's, the current rural recession has seen less migration to the cities and more intra-regional migration ... this is because, unlike the 1960's when the cities offered good employment prospects and were the main locations for tertiary education facilities, in the 1980's the metropolitan areas have levels of unemployment not much lower than the rural areas and educational opportunities in rural centres have increased ...the important factors that mitigate against a rapid population decline would appear to be a set of developments that give greater protection to household income, the improvement in rural economies in terms of the diversity of activity and services provided, the decline in the strength of the labour market, and a group of social and preference factors favouring a rural lifestyle. (p 29)*

Table 2. shows that,

> *...between 1976 and 1981 centres with populations of 50 000 - 99 999 experienced most growth, but that considerable growth also occurred in areas of smaller population. In contrast, population growth in centres with populations of 100 000 or more was fairly slow between 1976 and 1981. (CSC, 1987, p12).*

Table 2

Population change in settlements of various sizes in Australia, 1976–1981

Type of settlement #	Population 1981	Percentage change 1976–1981
Rural	1 963 982	11.8*
Under 1000	447 319	13.4*
1000–2499	422 115	11.4*
2500–9999	1 003 425	11.5*
10 000–24 999	799 627	13.1*
25 000–49 999	505 761	12.0*
50 000–99 999	606 213	17.5*
100 000–249 999	681 804	5.7
250 000–499 999	258 956	3.0
500 000–999 999	2 634 191	6.2
1 000 000–2 999 999	5 452 942	4.0
Total	**14 576 335**	**7.6**

* Above national average rate of growth # Population size categories as at 1976

Reports that the Australian rural economy performed badly during the 1980's are supported by writers in the field (Reid, 1988). Background information on the rural economy is provided by the Commonwealth Government's statement, *Economic and Rural Policy* (1986),

...the sectors real net income is expected to be down 21%, to the second lowest level since records began in 1950-51. It looks set to fall further ... such developments come just three years after farm incomes fell to their lowest levels on record in 1982-83, as a result of drought ... many farmers have not had time to recover and now face serious financial problems. (p 6.)

Further,

...the difficulties are unevenly spread, and are worst in the grain, sugar, dairy, sheepmeat and some horticultural industries. Returns are more satisfactory - though by no means buoyant in the wool, beef, fishing and forestry industries. In much of Eastern Australia, however, farmers are again beginning to feel the adverse effects of dry conditions. (p 6.)

There are no windfall solutions to current economic problems. Reid (1988) argues, 'the most promising solutions require community-wide actions to adapt to change and to exploit the creative opportunities for economic growth'. He eludes to a link between rural development and broader school responsibilities.

Such a link, between rural education and economic development, is well documented in the literature (Encyclopaedia of Educational Research, 1982; Hobbs,1979; Rosenfeld,1983; Sher,1977; Warren,1977; Randell,1981; Brown,1987; CSC,1987; Meyenn,1985; Whitfield,1981; Brown and Maisey,1980; Solstad,1981). Educationally the central themes of this link are curriculum development and school - community relations. That the Country Areas Program has developed structures for a high degree of community involvement and fostered sharing networks among schools is supported by Randell (1981). However, this view may soon be modified as a result of recent developments. Mosher (1971) meanwhile, distinguishes between essentials for development and accelerators of the process,

...only if the essentials (favourable prices, access to markets, availability of transport, extension services and research) are available to stimulate rural development do other factors, the so-called accelerators, gain in importance; and amongst these accelerators is education. (p 4361)

The parameters of an education - economic development link may not be as clear as some would articulate,

...it is an old and widely held belief that education can contribute to economic development but, ... neither educators nor economists have a recognized theory of how it happens. (Ranson, 1988)

...even in cases where a positive association is revealed, great care should be taken before imputing the notion of causality. (Colclough and Hallak, 1976)

Although it is accepted that education in rural areas has a fundamental impact on local development, the relationship and dimensions are equivocal.

KEY CONCEPTS EMERGING FROM THE LITERATURE

Rurality.

One of the most difficult tasks encountered in discussing 'non-urban' or 'rural' is that of definition ...It has different meanings when viewed historically, statistically or philosophically. (Warren, 1977, p 4.)

Researchers have inundated the literature in support of Warren's statement (Sher, 1981; Nachtigal, 1982; The Encyclopaedia of Education, 1971; Diez Prieto, 1988; Helge, 1985; De Young, 1987; Darnell and Higgins, 1983; Tamblyn, 1975; Whitaker, 1983; Rios, 1988; Mathews and Vanden, 1986; Peters, 1983; Friedland, 1982; Luloff, 1984; Jordan and Hargrove, 1987).

Internationally, 'ruralness like beauty, lies in the eye of the beholder,' (Sher, 1981). Using population statistics, the Scandinavian countries define rural as open countryside with fewer than 200-300 residents. In France, Germany, Greece, Iceland, The Netherlands, New Zealand, the United States and Yugoslavia the number of residents increases to a range from 1000-2500. In Austria and Belgium fewer than 5000 residents define rural. While in Italy, Spain, Portugal and Switzerland the number dramatically increases to fewer than 10 000 residents. Australia and the United Kingdom use a range of criteria based on socio-economic as well as population statistics (cited in Sher, 1981).

The obvious conclusion to be drawn here is that there is no single definition of rural or sparsely populated which is meaningful in an international context. (Sher, 1981, p 22).

Helge (1985) goes further when she suggests that 'quality research to assess the effectiveness of rural education has been hampered by inconsistently applied definitions of rural' (p 1.). Such inconsistencies are not limited to empiricism. There are basic philosophic differences in constructing a rural definition.

Broad components of rurality have been suggested by Luloff (1984) as ecological, occupational and cultural and by Davis (1987) as social, cultural and professional. Charles (1968) and Nachtigal (1982) pertain that rurality occurs along a rural-urban continuum 'with the degree of rurality depending upon environmental, occupational and socio-cultural considerations' (Charles, 1968, p 1). The key to these distinctions seems to lie in relationships that exist between people, external conditions and the environmental context. As stated rather superficially in The Encyclopaedia of Education (1971),

...the key to any rural-urban definition is not in numbers of people, rather, it is in relationships between people and between people and the land.

In a more complex sociological concept of rural Whitaker (1983) maintains that conceptions of rurality are multidimensional and as such require multidimensional typologies.

Before considering several working definitions of rurality it is necessary to consider the point made by Rios (1988). She believes that defining the concept rural depends upon the background and need of the researcher be they demographers, policymakers, sociologists, journalists, legislators or educationists. Rios postulates two categories of definitions - qualitative and quantitative. (Transposing 'Australia' for 'America' provides a relevant contrast). She states,

...agencies and researchers need quantitative measures that can be easily manipulated, sorted and compared. Others who are closely involved know that their part of rural America is qualitatively different from other rural areas.....It is difficult to capture qualitative

measures in ways that readily translate to legislation, policy or management. Further, rural America's insistence that it is not only different, but has differences within itself, is both its strength and its weakness. The inability to present a unified, powerful rural America to legislators and other policymakers ensures that rural issues, such as education, will continue to suffer from a lack of recognition and resources (p 1.).

Australian research has tended to define rural using a variety of descriptors:- population density and distance (Scott,1969; Dunnell,1980); community size and degree of isolation from the sole major metropolis within a state (Lake,1985); educational regions, population structure, ethnic groups and economic base (Duck, Webb, Cunningham & McSwan,1988); Country Areas Program (CAP) area, distance from urban centre, economic base, employment opportunities and population density (French,1981); Commonwealth Taxation Department zones (Brentnall and Dunlop,1985); and by default, defining urban and therefore anything that remains as rural (Education Commission of New South Wales,1983; Commonwealth Schools Commission,1987).

In the Schools Commission study *Schooling in Rural Australia* (1987), Rural Australia was defined as being all of the nation excluding the greater metropolitan regions and generally areas within 50km of those regions. Figure 3. represents the demarcation lines used to distinguish metropolitan, provincial and remote areas.

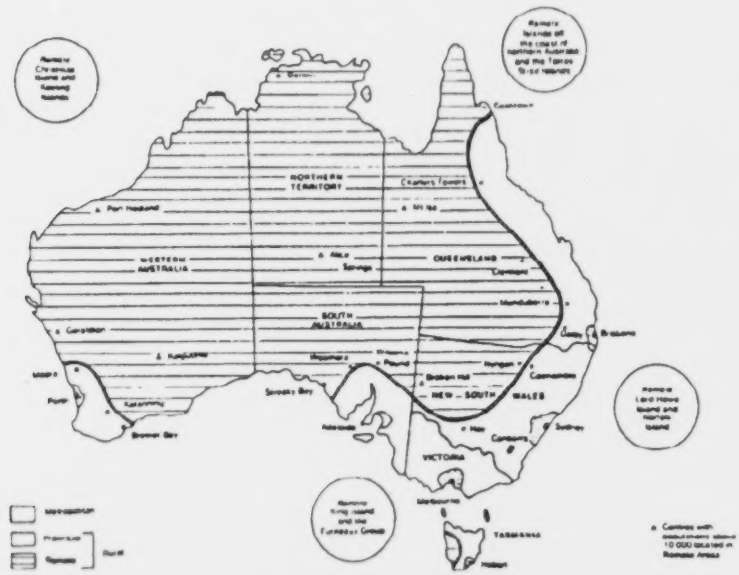

Figure 3 Definitional map of rural Australia from *Schooling in rural Australia*

It is obvious even from the few papers cited, that researchers have been idiosyncratically creative in producing functional definitions of rurality. Unfortunately differential definitions at best, make difficult any comparison of outcomes and at worst, emasculate research findings due to the inconsistencies applied when establishing frames of reference from which research is generated.

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Current research by David McSwan and Jack Walton (1990) at the Rural Education Research and Development Centre may address the need for a consistent, statistically viable definition of rural Australia. Using *Schooling in Rural Australia* (1987) as a referent (Figure 3.), they have constructed a definition based on access to Higher Education facilities. Thus 'a rural student is defined as a person who,

a). lives in the area defined by the Schools Commission (1987) as remote.

or

b). lives in an area defined by the Schools Commission (1987) as provincial but where post codes in the opinion of critical consultants would mean that such a student would not have daily access to a University or CAE.'

In this definition, critical consultants refer to senior supervisors and managers of mail centres throughout Australia.

A most interesting piece of research conducted for the Country Areas Program by Griffith and Tiong (1989) also has the potential to be used as a national benchmark. They provide a modified formula using 1986 census data to define rural. 'The total population within certain specified distances from major population centres of 5 000 or more and 10 000 or more was used by applying gradiated weighting factors to the population, based on these distances'. (p 2, in press)

Isolation and Remoteness. The Macquarie Dictionary (1987) defines isolation as 'to place or set apart; so as to be alone' and remote as 'far distant in space; out of the way'. The impact of these concepts on the quality of an individual's lifestyle may not be fully comprehended unless experienced first hand. As Pearl Logan (1989) writes,

... all of us who have lived in remote areas know the real traumas of coping with problems on our own. Isolation is not purely psychological - there are the physical elements of time and cost in trying to span long distances - with inadequate means of communication or travelling great distances on indifferent roads (p 6.).

Pearl Logan has experienced what writers generally refer to as the multifaceted dimensions to isolation. Some of these listed by Higgins (1985) include 'geographic, ethnic/cultural, language, social, economic, professional and exceptionality'.

In the educational research literature the terms isolation and remoteness are interrelated such that an area defined as remote is also deemed to be geographically isolated. Remoteness is therefore defined in terms of space, time and distance while isolation not only includes remoteness but all the other factors associated with being 'set apart'.

Remoteness is a problem unique to the provision of education in rural areas.

Rural Education. One can not define rural without rural education according to Tamblyn (1975). 'They are inextricably interwoven, for those very factors which describe rurality very much determine rural education' (p 1.). One point that remains common among researchers is rural education defined as that which prevails in the area designated by their particular study as 'sparsely populated', 'rural', 'small rural', or 'remote' (Krahmer and Sturgess, 1967; Holmes, 1981). What these authors may in fact be referring to however is not rural education but education in rural areas.

Recent literature, less concerned about defining the boundaries of rural education, has concentrated on defining a rural education per se. Put succinctly, Darnell and Higgins (1983) argue that,

... it is now recognized that education in rural areas is not a discrete object that can be labelled 'rural education'. This suggests that in the past we were deluded into looking at rural education as a single commodity and we have been seeking a single concept or principle of rural education that may be deployed unilaterally ... there is no single theory, principle, concept or notion that is universally appropriate to education in non-urban settings. (p 31.)

The notion of a difference between 'rural education' and 'education in rural areas' will be discussed in a later section.

Distance Education.

The term distance education covers the various forms of study at all levels which are not under the continuous, immediate supervision of tutors present with their students in lecture rooms or on the same premises, but which, nevertheless, benefit from the planning, guidance and tuition of a tutorial organisation (Holmberg,1977).

In addressing both the concepts and terminology of distance education, Keegan (1980) firstly differentiates between the forms of distance education, identified by their use of technical media as the basis for the learning materials (Figure 4.). Secondly, while content with Holmberg's (1977) learner focused definition above, he lists the main elements he considers essential in composing a definition of distance education,

* the separation of teacher and learner which distinguishes it from face-to-face lecturing
* the influence of an educational organisation which distinguishes it from private study
* the use of technical media, usually print, to unite teacher and learner and carry the educational content
* the provision of two-way communication so that the student may benefit from or even initiate dialogue
* the possibility of occasional meetings for both didactic and socialisation purposes
* the participation in an industrialised form of education which, if accepted, contains the genus of radical separation of distance education from other forms. (Keegan,1980, p 33).

For the purposes of this paper Holmberg's (1977) definition quoted at the beginning of this section is accepted.

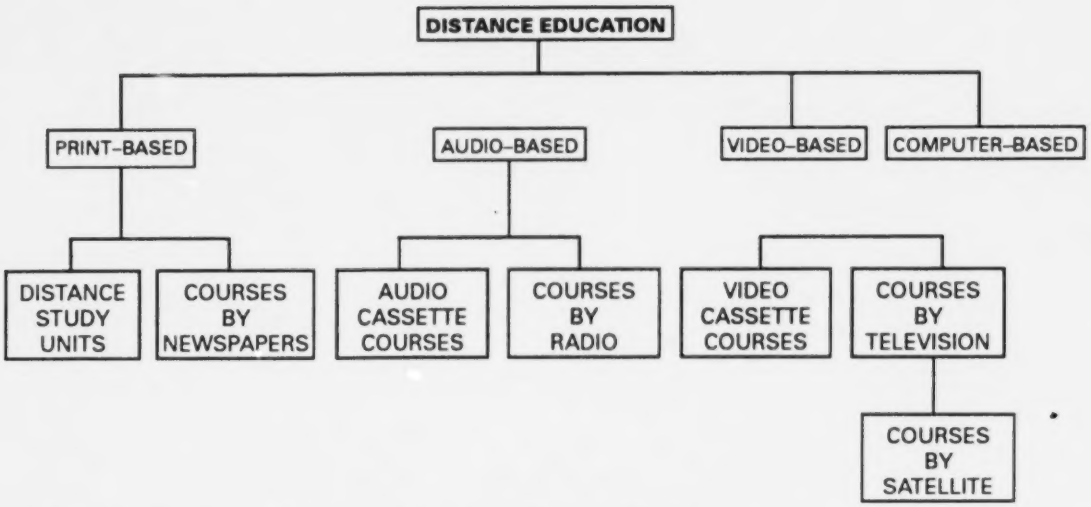

Figure 4 The forms of distance education (Keegan 1980)

This introduction has attempted to set the scene in Australian education in rural areas by briefly drawing the attention of the reader to the framework of the Australian education system set against the population distribution in rural areas. Within this context some relevant concepts associated with these areas have been explored. It would appear that further reflection is required to determine definitions which will be more useful to researchers and policymakers. What is rurality? Which geographical areas can be called rural? Is there a continuum of rurality? Should education associated with rural areas be considered under an overall heading of 'rural education or 'education in rural areas? Further research is also required to ascertain the appropriate extent of local school involvement in community economic development. Entrepreneurial activity by schools is not new. How this is approached in small sometimes isolated communities is a matter for discussion.

THEME ONE: SCHOOLING

The components of this theme relate to the broad aspects of schooling provision in rural areas and include teachers, students, school - community relations and accommodation - boarding arrangements. The writer realizes that some readers may feel that this theme is too all encompassing and that it could better be served by at least two themes (for example schooling and community). The problem is acknowledged: members of the 'Think Tank' may quite well suggest some rather different treatment.

Teachers

The research literature on teachers can be classified under three headings: recruitment and retention, training, and affective factors. A common feature of the literature in this area is the replication of findings and recommendations. On pedagogical grounds, researchers unequivocally share more similarities than differences.

Recruitment and Retention. The retention rate for rural teachers has historically been low (Williams and Cross 1985). Bessant (1978) labels rural teaching service an 'apprenticeship' for urban teaching. A convenient method for Education Departments to staff rural schools, Bessant says, is to follow the now established pattern of two or three years country service followed by the opportunity to return to an urban area. In Queensland, teachers in rural areas are required to serve three years in order to receive full transfer entitlements. This can mean that schools change one third of their teaching staff annually. Following the cessation of bonding student teachers, 'incipient demands that a willingness to accept country appointments should no longer be a condition of employment, continue to be made by teachers' (Connor 1973). The Karmel Committee (1971) on the other hand, supported mandatory country service to attain equal provision of teachers in areas of varying population density.

Explanations for teacher reluctance to accept rural appointments have been widespread and generally consistent. They include financial rewards and degree of support (Allred and Smith,1984; Matthes and Carlson,1986; Kleinfeld and McDiarmid,1986); limited inservice, assignment to more grade levels, lower budgets and salaries (Matthes and Carlson,1985; Barker,1986; Horn,1983); greater costs of living, standards of housing, restricted access to study and social life (Muse,1980; Deschamp and Beck,1979; Haughey and Murphy, 1985); and minimal incentives and rewards (Reed and Busby,1985). The single most important reason given for prospective teachers' reluctance to accept country appointments however, is the fear of isolation from family and friends in an unknown place (Watson, Hatton, Squires and Grundy,1987; Haughey and Murphy,1985; Deschamp and Beck,1979; Barker,1986; Meier and Edington,1983; Watson,1988). Watson etal. (1987) go on to add that,

> *...the great majority of respondents valued the good qualities of country life - lower stress, healthier lifestyle, lower pollution, less pressure on time. But these attractions were outweighed by a desire for proximity to familiar people and places.*

Further they found that,

> *...fear of isolation is sufficiently deep seated to make large numbers of young teachers accept the disadvantages of temporary appointments - no promotion or superannuation benefits - rather than risk being sent to an unknown location.*

Two models of providing teacher services to schools are postulated by Ankrah (1982).

> *The rural deficit model tends to encourage the use of compulsory posting and incentives (presumably to compensate for some inherent rural weakness), whereas the rural challenge model searches for better ways of preparing teachers for services in remote rural schools. (p 1.)*

Among the latter initiatives, Ankrah (1982) mentions the recruitment and preparation of local teachers. Cusak (1974) maintains potential teachers already exist among married locals and single women, only some of whom prefer to remain in large centres after training or updating.

The issue of incentives provided both to recruit and retain teachers serving in rural areas has managed to maintain momentum in educational circles, albeit slowly. Writing in the *Queensland Teachers Journal* in 1969, J.D. Storey assured members that 'the Queensland Teachers Union is at present negotiating in an effort to obtain a system of allowances commensurate with the remoteness of an area'. The *Ahern Report* on isolated children and isolated schools (1979) made a similar statement by recommending a re-examination of Education Department policy with respect to the selection of teachers for service in remote schools and the regulations governing service and conditions. Again in 1986, the *Ministerial Advisory Committee on Distance Education* recommended, among other things, an improvement in physical living characteristics, enhanced provisions for induction, pre-service sensitivity awareness, the compilation of instructional techniques and materials, and the clustering of schools to permit viable sharing of resources.

Teacher incentives remain on the rural agenda, if for no other reason, to recognize the contention that teachers provide an important element of continuity in rural schools (Howse,1988). Perhaps in the future, teachers, schools and communities will be matched to accentuate the inherent strengths each component impinges on the rural educational milieu. Or perhaps more realistically, the complex staffing of rural schools in a centralised bureaucracy like those in the Australian States, will inevitably continue to find it difficult to respond to localised, individual levels (Meyenn,1985).

Training. A feature in the *Melbourne Age* (1-7-86) reported Cohen (1987) as stating,

> *...today's students are the brightest and most talented generation ever produced and today's teachers are the most highly qualified and many of the most committed in Australia's brief history. But I believe that we have still a long way to go in providing them with adequate professional teacher education (p 47).*

The number of writers published in the field of teacher training, despite what some describe as general research paucity, attest to the belief that 'the teacher is the key to the quality of rural education' (Matthes,1987). Most educationists would no doubt agree that Matthes quote is equally valid without the word rural (e.g., Humphreys,1972).

The need for both pre-service and inservice specialised training for teachers, who are presently or likely to be teaching in rural areas, is well documented (Sher,1981; Oelschlager and Guenther,1983; Muse,1980; Nelson,1983; Guenther and Weible,1983; Barker,1986; Barker and Beckner,1985; Massey and Crosby,1983, Baker and Ambrose,1985; Meier and Edington,1983; Grippin,1985; Amodeo,1982; Donaldson,1982, Horn,1981; Lake,1985). Collectively these papers purport that:

a). few institutions of higher education (and less than 2% of nearly 14 000 faculty members in a Barker and Beckner,1985 study) have programs designed specifically for rural education, and

b). teacher training programs are unresponsive to the needs of prospective rural teachers. (Cited include unawareness of rural life, no practice teaching multi-grades, and limited curriculum adaptation).

Watson (1988) found that 88% of N.S.W. teacher graduates and 84% of W.Aust., graduates, in 1986 and 1987 respectively, received no rural component in training.

Two pieces of identified research question specialised training. Amodeo (1982), in reviewing 265 rural schools across nine American states, found 'nearly 80% of the principals and teachers had no specific preparation for rural teaching ... 41% (of whom) felt such preparation was not appropriate'. Young (1981) argues for a generic perspective,

> *...If the professional life of a teacher is seen as a whole rather than piecemeal then the role of the teacher education institutions is one of induction into modes of thinking and skills without attempting to train for a 'finished product' (p 173) ... the greatest danger lies in an over emphasis upon special training for rural education to the exclusion of more general considerations which are professionally important to teachers in all areas (p 174).*

An impressive article on teacher training titled *Teacher Education as the Sabotage of Excellence in Schooling* was written by Cohen (1987) who maintains,

> *...teacher education has become highly efficient in at least three ways: helping students to prepare specific lesson goals, handle traditional subjects areas and content matter and thirdly, in the use of routine teaching strategies. In certain 'training situations' this may be perceived as adequate. But for schools with characteristically wide ranging abilities, interests and talents amongst their students, teachers will want to move way beyond these teaching achievements (p 48).*

Table 3. depicts Cohen's review of six of the major teacher education emphases, and shows their total mismatch with the requirements for excellence in schooling.

Table 3 Mismatch between major teacher education emphases and requirements for excellence in schooling (Cohen 1987)

MAJOR TEACHER EDUCATION EMPHASES	REQUIREMENTS FOR EXCELLENCE IN SCHOOLING
• Highly developed technical skills	• Teachers with well-developed humane and caring outlooks
•Subjects/contents of disciplines (3 of 4 years in most end-on Dip. Ed. programs)	• Growing need for students to receive personal and pastoral care (often zero)
• Large-scale application of age/stage theories	• Teacher sensitivity to individual talents/ excellence of individual children
• Compartmentalisation of curriculum into subject areas	• School-based curriculum decision-making as whole-staff, whole curriculum enterprise
• Didactic lectures dominate	• Modelling of personalised learning approaches, small group activities, negotiation and contracting of curricula
• Solely academic selection criteria.	• Increasing the need for provisions of non-academic curricula.

The threads from the teacher training section of the literature imply a pedagogical shift in emphasis. From an empathic sensitivity of student needs and an ability to contribute to the devolution of authority to schools, teacher graduates require at the minimum it seems, an awareness of the community, local expectations, and the creative adaptation of resources.

'Teacher training programs designed to give non-rural students the knowledge, background, skills and attitudes necessary for successful rural teaching and living' (Williams and Cross,1987) tend to emphasize early pre-service field experience to rural schools (Donaldson,1982; Watson, Hatton, Squires and Grundy,1987; Lake,1985; Haughey and Murphy,1984; Northern Illinois University,1971). Programs also focus on providing information and developing personal links (Watson etal,1987; Williams and Cross,1987; Blackwood,1987); experience teaching multi-grade classes (Haughey and Murphy,1984); developing students' abilities in curriculum organisation and professional ethics (Oswald,1983); diversifying selection procedures and content areas, revamped theoretical bases, modelling individualisation and personalisation, and the development, implementation and evaluation of curriculum decision making (Cohen,1987); and finally in accessing the experience of various stakeholder groups in rural education - parents, teachers, principals and support personnel (J.C.U. course in progress).

Affective factors. The affects (feelings, attitudes and emotions) that teachers bring to a rural school appear to be both moulded by experience and training and by the anticipations of the way they will interact in the community. Replicating a previous Sergiovanni study, Leavitt (1986) concluded that,

> *...as long as a teacher experienced personal success, and was recognized for the success, he/she derived satisfaction from work (in rural schools) ... (and) the interpersonal relationship with (rural) students allowed for such feelings of personal success.*

Young teachers can sometimes be viewed negatively by the public, but when looked at objectively, benefit country schools and communities in the majority of cases (Doecke,1987). They are often described as inexperienced, progressive in orientation, ambitious, keen and actively involved (Scott,1969; Doecke,1987).

In the next section the heart of education, the student, will be examined.

Students

The ingredients of the literature on students include achievement, retention, and the education of minority groups.

Achievement. Twenty-one years ago Haller (1969) asserted that 'by and large, non-metropolitan people are the most poorly educated'. Comparative research on rural-urban student achievement levels has been conducted since with relatively consistent outcomes, despite considerable differences in methodology. In 1969 Scott reported that ' the rural children sampled tend to have a significantly lower mean intelligence quotient than the urban children studied'. Scott's findings are supported by Watkins (1978) who found that 'proportions of pupils with low educational attainment appear higher in rural areas'.

A body of later research in this area reports positive, minimal or no significant difference in achievement levels (Melnick,1987; Coladarci and McIntire,1988; Moreau,1987; Dolly and Katz,1986; Edington,1979). It is fair to add that definitions of 'achievement' and the tests used to ascertain comparisons vary greatly over time. Edington and Koehler (1987) make the point,

...current educational research efforts are examining rural/urban differences in achievement, appropriateness of rural/urban achievement measures, effects of parents and community on the attainment of rural students, and how well rural students succeed in higher education. To accurately assess the small, rural school's impact on students, rural-urban comparisons must be made on students who are matched by origin, background, and access to information. Recent composite results find little difference in the academic achievement of rural and urban students or in their desire to attend college (p 1).

'In the final analysis the present situation is that current research is not able to prove categorically that either group achieve better results consistently' (Doecke,1987). This may to a large extent be due to an enriched stimulation in rural areas through the media, resource provision and educational practice that twenty-one years ago was less available to rural than to urban areas.

Two factors which may contribute to achievement levels are academic learning styles and student attitude. In a study on *Learning Style Variations between Rural and Urban Students* , Cox (1988) found 'rural students scored significantly higher in serious, analytical, and active practical learning characteristics ...as well as being more observation centred and fact oriented'. To the question of attitude, Sinclair (1983) found learned helplessness and external locus of control in students in inner city and geographically isolated areas, a representation of which appears in Figure 5.

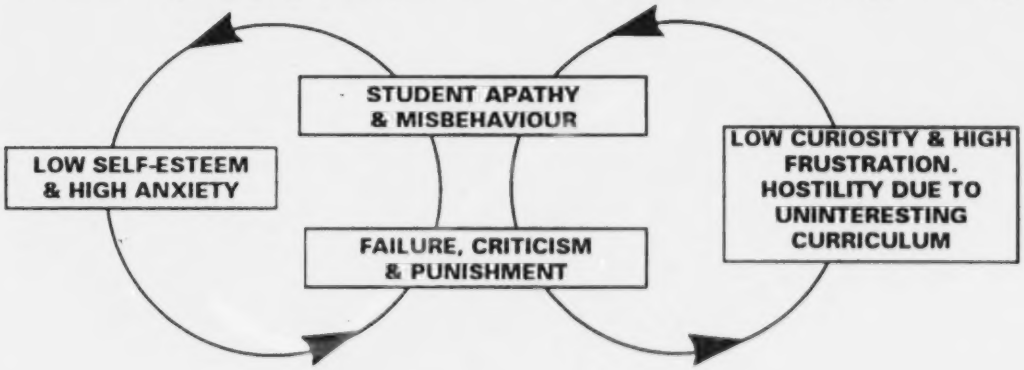
STUDENT APATHY & MISBEHAVIOUR
LOW SELF-ESTEEM & HIGH ANXIETY
LOW CURIOSITY & HIGH FRUSTRATION. HOSTILITY DUE TO UNINTERESTING CURRICULUM
FAILURE, CRITICISM & PUNISHMENT

Figure 5. The cycle of learned helplessness (Sinclair 1983

The 'learned helplessness ' described by Sinclair (1983) was demonstrated by workshops conducted in two P-10 rural schools by Staunton and Clark (1988). Using repertory grid methodology a relationship was apparent between lack of student motivation to succeed and a negative mental set on the community and future aspirations. Cosby (1979) believes this negative attitude is rural pervasive and attributes negative connotations from the mass society toward anything rural, as contributing to a general negative attitude to rural areas. Future research may illuminate a form of self fulfilling prophecy on behalf of rural students somewhat akin to Sinclair's representation.

Retention. The retention of students from compulsory to post-compulsory secondary years has been of particular interest to Education Departments and researchers alike. Post-secondary retention has been related to parental expectations (Odell,1988); parental expectations and peer group pressures (O'Neill,1981); family social and economic status, ethnicity, rurality, school system, gender and family wealth (Williams,1987); socio-economic background, family size, community origins, availability of educational facilities, birth order, sex, language, ethnicity, significant others and information access (Deosaran.1975); family background and parental influence, educational and occupational aspirations and expectations of the student, financial and emotional costs to families, early school experiences and school offerings (CSC, 1987); and family expectations and geographic isolation (Brown,1985).

The continuation of students from secondary to tertiary education has been discussed by Brown (1985). He refers to non academic factors, such as the transition from a rural community to a college community, as impacting upon the rural student dropout rate. Anderson's (1974) study indicated that graduates of the smallest High schools withdrew from college in significantly greater numbers than did graduates from larger High schools. This is of particular concern in a large mining town in Queensland situated remote from centres of Higher Education. Of the students who gain entry to University of Queensland from this town (the furthest university from the town), a higher percentage return home after one semester, having fulfilled all course requirements, than from any other location. The university attributes this to homesickness.

Retention rates in Australia are provided by DEET (1989). Table 4. provides retention rates by sector for selected years 1971 to 1987 and includes the criterion used for calculation.

Table 4. Apparent retention rates by sector, selected years, 1971 to 1989 (DEET 1989)

Percentage retained to:	1971	1974	1976	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Year 10 – All schools	80.8	82.1	86.6	88.8	89.4	90.5	91.4	92.9	94.3	93.8	93.8	94.1	95.2
Males	81.9	82.0	86.5	88.3	88.5	89.5	90.3	92.0	93.9	93.4	93.3	93.2	94.5
Females	79.7	82.2	86.7	89.5	90.4	91.5	92.6	93.8	94.8	94.3	94.3	95.1	95.8
Government	78.5	79.6	84.9	87.1	87.3	88.5	89.2	90.7	92.4	92.3	92.1	92.0	93.6
Non-Government	88.7	91.0	92.8	95.2	96.8	97.1	98.6	99.8	99.9	98.5	98.5	99.9	99.4
Catholic	82.4	84.0	88.9	91.5	92.9	93.5	95.3	96.1	96.5	95.5	95.6	96.3	96.3
Other	106.4	105.2	102.8	105.5	106.0	107.0	107.8	109.2	108.5	105.2	105.3	107.7	108.0
Year 11 – All schools	46.0	47.7	52.0	53.4	53.0	54.0	55.2	57.4	63.6	65.5	66.7	68.3	71.0
Males	49.1	48.2	51.4	51.1	50.4	50.8	51.6	54.2	61.7	63.6	64.6	65.7	68.1
Females	42.7	47.1	52.8	55.8	55.8	57.3	59.0	60.8	65.6	67.5	68.9	70.9	74.0
Government	42.1	42.8	47.5	48.8	48.0	48.7	49.7	51.6	58.3	60.6	61.7	63.2	66.9
Non-Government	59.2	64.7	67.9	69.6	70.8	72.2	73.5	76.1	79.9	80.2	81.2	82.4	85.0
Catholic	45.6	51.7	56.3	58.4	59.5	60.9	62.8	65.7	70.1	70.5	72.0	73.3	75.5
Other	98.0	100.9	100.3	100.9	101.8	104.2	102.7	104.4	105.1	104.1	103.0	103.4	106.0
Year 12 – All schools	30.8	32.9	34.9	35.1	34.7	34.5	34.8	36.3	40.8	45.0	46.4	48.7	53.1
Males	34.1	34.1	34.8	33.1	32.4	31.9	32.0	32.9	37.5	42.1	43.5	45.8	49.4
Females	26.9	31.6	35.3	37.3	37.2	37.3	37.8	39.9	43.9	48.0	49.5	52.1	57.0
Government	25.9	27.3	29.6	29.6	28.9	28.4	28.5	29.6	33.7	38.4	39.9	42.3	46.8
Non-Government	48.1	52.5	54.0	54.5	55.4	56.1	56.9	58.5	62.5	66.3	65.7	67.4	70.4
Catholic	33.9	39.1	41.5	43.1	44.1	44.8	45.6	47.5	51.3	54.8	55.1	57.4	60.3
Other	81.7	90.3	88.9	85.5	87.1	87.9	89.2	88.5	92.9	92.7	92.2	91.2	93.4

(a) These rates are measures of the tendencies of members of student cohorts to remain in school from the first secondary year to the third last (Year 10), second last (Year 11) and final year (Year 12) of secondary schooling. To calculate the apparent retention rate, at the Australia level, of the student cohort group who are currently (1987) in Year 10 from the commencement of secondary schooling the total number of students in Year 10 in 1987 is divided by the sum of students in Year 7 in New South Wales, Victoria, Tasmania and the Australian Capital Territory in 1983 and those students in Year 8 in Queensland, Western Australia, South Australia and the Northern Territory in 1984 (since those years represent the commencement of the secondary school system in the respective States – see page vii) and convert the resultant figure to a percentage. The retention rate thus derived is called an apparent retention rate because the method of calculation does not explicitly take account of net changes to the school population due to migration and death, nor of those students who spend more than one year in the same grade.

Queensland schools progression and retention rates were compiled by Kearney (1989). *Progression rate* relates the number of students in year level N to those in year level N-1 in the previous year while *retention rate* is a simplified method of showing the survival of a particular cohort as it progresses through its schooling. Kearney (1989) draws the following interstate conclusions,

> *...* progression rates of 59% for Years 10-12 and 86% for Years 11-12 for Queensland Government schools, are second only to those of the Australian Capital Territory, for 1986-87.*

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** retention rates for government and non-government schools in Queensland are first in rank for Australian States and Territories, for Year 8 to 10, second for year 8-12, and fourth for Year 8-11.*

** Queensland government schools displayed a retention rate from the first year of secondary school to Year 12 of 56% which is also second only to that of the Australian Capital Territory in 1986-87. Retention rates for all schools to Years 10, 11 and 12 at 99.1%, 73.1% and 62.5% are well above the Australian averages of 95.2%, 71% and 53.1%. (p xi).*

The particular point to be made from these figures is that retention rates have increased during the last decade, and continue to do so.

Minority groups. Radford (1939) made a remarkable statement that if applied today would cause considerable turmoil in terms of service provision. He said,

...If we take five as the starting age for Grade One and age seven in this grade as indicating retardation, 21% (of students) are to be considered retarded ..... retardation is not therefore a serious problem (p 65).

The education of minority groups, in the literature concerning rural education, focuses predominately on the provision of services to both disabled student and aboriginal student populations. Nachtigal (1982) makes the point that 'these special populations should not be penalised for where they live'. Quoting incidence figures from 1979/80, Berry and Langford (1989) maintain that 12% of all children in Australian schools were considered disabled.

...It is generally agreed that fully satisfactory ways to meet the needs of these students in remote areas have yet to be found ..... the principles and practices identified as the most appropriate in providing for the needs of disabled students in rural areas are also likely to apply to other special needs groups, and thus would have wide application (CSC,1987)

The CSC (1987) report also proposed 'that this is an area for urgent inquiry'.

School - Community

The relationship of school and community is discussed under the following headings: working together, school closure, school size, rural lifestyle and rural school characteristics.

Working together. 'Community participation is important in rural education: that is, that the community has a central place in the educational decision-making process' (Listening and Responding1984, cited in Doecke, 1987). The interaction and involvement of parents and the wider community with the local school is supported by a number of writers and institutions in various degrees. Nachtigal (1982) views the rural school and community as an integrated social structure while Whitfield (1981) and Fuller (1988) draw a link between community participation and student achievement.

... involvement of school with parents and community and vice versa, thereby promoting a greater total cohesiveness of intentions, attitudes and aims, benefits conventional educational performance (Whitfield, 1981).

The Queensland Department of Education's *Working Together Kits* were introduced into schools in 1989 as recognition that 'education is a shared community responsibility and for high-quality education, all stakeholders should be actively involved in decisions about schooling' (Matheson, 1989). A process of inducting school communities into the strategies and stages inherent in successful working together relationships was undertaken across the state throughout 1989 at a Regional and District level. Similar programs have been described by Toy (1987) who sets out in his book a rationale and model plan for school - community relations.

The whole picture is not rosy however. Several authors are guarded about parent participation. In their paper on *The Lack of Parent Participation in Rural Schools*, Dolly and Page (1983) reported that most parents (in their study) refused to serve as volunteers and did not complete school based training programs. Bessant (1978) refers to local participation being confined to fund raising and Meyenn (1985) points out that,

...if rural improvement is to be taken seriously then parent and community involvement is essential ... (but)...if decisions are required at the local level then there must be commensurate authority to make them (p 69).

The most cynical view is espoused by Sher (1985),

...what I have witnessed is that we professional educators want community participation as long as it remains 'manageable' (that is under our control) and so long as it furthers the programs, policies and practices we have created. Community participation most often has been used as a means to legitimate and ratify our good ideas ... we're even happy to include relatively 'safe' parents and community representatives on various committees - again so long as we professionals retain de facto power over what ends up happening ... a sense of impotence among parents and community representatives is created as a direct result of our claims as professionals to special powers that equip us to understand best what their children need and how those needs can best be satisfied ... many rural parents do not participate in school affairs either because they feel intimidated or because they see it as a sham ...the issue is not whether there should be parental participation and community involvement in the rural schooling process - I take that as a

given in any avowedly democratic society. The contentious issues involve the nature, area and extent of such involvement . What is the proper amount of decentralisation of authority and devolution of power to local communities in relation to the education of their children. Equally important, who is legitimately empowered to decide what amount is 'proper'? (pp. 59/60).

According to Vaughn (1984) the responsibility for school - community relations rests with the school principal. No doubt some principals would agree. The task however, seems not to reinforce in whose office 'final' decisions are made, but to empower a representative school community committee to locate the boundaries of devolutionary decision making within the school and in the context of a large and complex interrelated school system.

School closure. 'If they close their rural schools, they close their rural communities' (Jess,1985). Rural school closure is an enormous decision and one which engenders an emotive response from the community threatened with losing their school.

Parent opinion from the Riverina Region of New South Wales cited by Meyenn (1985) suggests 'that it is by no means automatic that rural parents want their children to attend local community schools'. Some rural parents were concerned about teacher quality and the appropriateness of the curriculum which they related to school size.

Johnston (1981) argues that 'future closures of primary schools will be much more variably argued on individual cases ... (considering) ... attitude of local public, public use of premises, and quality of relationship between school and community'.

The importance of a lobby group to recognize rural people as a 'viable, credible, significant, vital, important and worthy minority' and to present alternatives to 'inevitable' small school closures is put forward by Baskerville (1981). He mentions the United States organisation P.U.R.E (People United for Rural Education) which is similar to the Australian I.C.P.A (Isolated Children's Parents Association).

Four conceptual frames of reference most frequently used to decide on school closure have been defined by Boyd (1987).

...i). Romantic - Traditional *reflects references to the one room school houses of long ago contrasted to the new modern, less personal buildings.*
ii). Urban - Idealistic *accepts urban institutions as synonymous with progress, seeing smaller schools as obstacles.*
iii). Rational - Technocratic *assumes a modern (larger) school would be more cost effective and reasonable.*
iv). Democratic - Localist *supports the opportunity smaller schools provide for a personalised, family-like education (p 1.)*

Boyd (1987) maintains the Rational - Technocratic argument, often reflected by administrators and government policy makers, was the most powerful and offered the prime justification for closing schools.

School size. Research on optimal school size (discussed more fully in Section 3.0) begins with the agreed premise that small schools are more expensive (per capita) to run than larger schools (Sher, 1981; Darnell and Higgins, 1983). Early research in the area according to Coladarci (1983) reveals inferential errors, naivete, intellectual puritanism and rational extravagance - it focused on optimal school size and pupil achievement. While Coladarci (1983) states that small is superior in terms of achievement , more recent studies show no direct correlation between enrolment size and pupil achievement (Green and Stevens,1988; Edington and Martellaro,1988). Current evidence may in fact suggest that our present conceptions of optimal school size could alter due to increasingly sophisticated telecommunications and a continued educational reform movement (Swanson,1988). The Japanese language taught from Townsville to Proserpine via interactive computer and audio transmission is evidence at hand.

Rural lifestyle. In a paper on the *Factors of Geographical Isolation Affecting People who care for Young Children*, Jeremy (1982) lists 18 characteristics of isolation,

- economic situation
- geographic location
- lack of education
- limited services
- poor communication
- lack of telephone
- lack of transport
- language and cultural barriers
- social situation
- feeling of inadequacy
- low self esteem
- lack of confidence
- loneliness or boredom
- lack of motivation
- no friends or relatives close by
- poor health
- climatic conditions
- children with special needs.

Such characteristics of a rural lifestyle, epitomize the heterogeneity of the rural milieu.

> *While people in rural communities tend to be more alike than people in large cities, rural communities across the country tend to be more unlike each other than large cities across the country; therefore local conditions need to be carefully considered in all State and Federal policies (Rosenfeld, 1981, p1.)*

A major report on the needs of inland Australia arose from the *Needs of the West Conference, 1984*.. The proceedings, edited by Gregory (1987) consistently reported communication (telephone contact and the availability of technology), education (the costs and disruption to life), health and roads as the most challenging concerns of a rural lifestyle.

Rural school characteristics. When delineating the characteristics of rural schools, writers generally include the conventional strengths and weaknesses associated with being small. The assumption is always that urban schools are therefore not small or perhaps not 'as small' as those found in rural areas.

For ease of interpretation the literature based characteristics of rural schools are presented in tabular form as listed in Table 5.

Table 5.

STRENGTHS	WEAKNESSES
Family like atmosphere	Restricted curriculum
Intimate student/teacher knowledge	Special needs not catered for
Cross age contact	Lack of competition & Academic stimulation
Small class size	Lack of peer stimulation
Parent/Community involvement	Poor buildings and resources
Organisational flexibility	Multi-grade classes difficult
Academic progress	Transition to large Secondary school difficult
Teacher knowledge of family background	Same teacher for several years
Curriculum relevance **Meyenn, 1985.**	Teachers lack support & professional contact **Meyenn, 1985**
Basic human relations	Itinerant staff
Versatile personnel	Poor administration
Pupils participate in planning	Insufficient finance
School integral part of community **Nachtigal, 1982**	Community apathy **Sasser, 1975**
Community education **Warren, 1977**	Region depends on single industry
	Students travel farther to school
Models for effective schools **Barker, 1986**	Less vocational guidance
	Families lower income **Hall, 1968**
Provide community stability **Sher, 1981**	
	Limited attitudes and aspirations
Smaller school districts	Pecking order for kids of nomadic professionals
Slower pace	Hidden poverty
Less pressured environment	Outsiders alienated
Opportunities for leadership development	Few leisure activities
Less formal interactions among teachers, staff and community **Encyc. of Ed. Research, 1982**	Limited job opportunities
	Few specialist staff
Student self reliance encouraged	No incentive for insular student to succeed
People share facilities and resources	Limited choice of school type
Community share cultural activities	Rapid turnover of teachers
Students more receptive and responsible **Gilmore, 1982**	Teachers varying experience **Gilmore, 1982**
School is community focal point **Boylan, 1988**	
	Narrow range of subjects **Dengate, 1988**
	Higher rate of student dropout **Davis, 1985**

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Although interpretations of such a diverse list of rural school characteristics is difficult, a common trend appears to be evident. Human resource interactions based on open communication among teachers, parents, students and the wider community are generally considered the strengths of the rural school. Limited curriculum offerings and inadequate resource provision (human and material) seem to constitute the weaknesses.

Nachtigal (1982) maintains that 'many of the deficiencies of small schools relate to size and therefore cannot be eliminated by definition. If the school cannot get bigger, it cannot get better'.

The elements listed in Table 5. form an important link in the discussion on rural education contained in Section 4.0. Do the weaknesses associated with rural schools constitute disadvantage, discrimination or difference?

Accommodation

If there is a paucity of published research in rural education, the most neglected area concerns the accommodation of students in order to attend school. Discussion in this section is taken from views of the service receivers - the rural and isolated families, with particular reference to R.H. Treweeke on behalf of the Isolated Children's Parents' Association.

The ICPA was formed on 30th April, 1971 at Bourke. It now represents a large rural and isolated minority across Australia. The Association, in Oct 1971, defined an isolated child as one who for geographic reasons has not reasonable daily access to an appropriate school (Treweeke, 1977). For these students, living away from home to attend Secondary school is based on three premises:

a). primary education should be provided in the home if possible and the characteristics of secondary education away from home are accepted (not however all the associated costs) (Treweeke cited in Beevers, 1981)

b). 'parents frequently believe that schools in rural areas can not provide the cultural milieu that is to be found in most metropolitan areas' (Braggett, Hatchard and Boylan, 1988)

c). 'many mothers in the bush do not find the prospect of teaching their own children attractive, even at primary level, and the thought of continuing on to secondary too daunting to contemplate' (Treweeke, 1977).

The decision reached by families to access secondary education away from home is the first of two major choices. The second involves the form of accommodation preferred from four alternatives. Treweeke (1977) summarized these alternatives as: boarding school, setting up a second home, private board and hostels. Each has unique features appealing to parents,

> ...boarding schools - *offer what many consider the highest standard in pastoral care. Students attend school and live at the one institution. The major drawback is high cost.*
>
> second home - *often involves primary children. Mother and children move to town and father remains on the property. Places great strain on marriages and is often not economically viable (700 families involving 1600 children opted for this solution in 1975).*
>
> private board - *appears more popular in some areas. Figures are difficult to obtain.*

> hostels - *constitute the major institutional alternative to Independent Boarding Schools. Concerns exist over physical facilities, suitable staff and their motivation, and isolation from the schools they serve. Some hostels try to fulfil some educational purpose as well (Treweeke, 1977: 220-221)*

'The need for educational boarding facilities can be seen to extend as far into the future as one cares to look' (Treweeke, 1977).

While parents accept the present reality of providing accommodation for secondary education, the ideal position is to have the same choice as those living in city and provincial areas - attending the local High School or paying tuition at a private school. As Treweeke (1977) concludes, 'that would have to be one of the tallest orders presented to anyone to fulfil'.

In 1990 Queensland has fifty non-government boarding schools catering for 9,360 students 80% of whom are from rural areas of Queensland and 4% are Aboriginal and Torres Strait Islanders.

In spite of Treweeke's comment parents are still faced with the prospect of having to educate their children away from home . This is becoming increasingly difficult because of the high cost involved. Governments should perhaps be provided with accurate data on boarding school costs so as to adjust allowance schemes for isolated people (McShane, 1983). Boarding school authorities are finding it increasingly difficult to operate in view of rising costs. The Commonwealth Schools Commission Study (1982) identified high wage costs as the main cause for high deficits in boarding schools.

These are significant concerns for both boarding school authorities and isolated parents.

In summarizing Theme One an analogy can be drawn between schooling and a machine. Just as the machine's operation is dependent on the function of each working part, so to is schooling dependent on teachers, students and school/community relations. Each component thus functions relative to the successful working of others. Successful schooling can only occur when teachers, students, and the community work together to ensure quality education and to continually evaluate the conditions under which quality education is deemed to flourish.

There are a number of distinctive areas in this theme which suggest the need for further research. While cross-sectional studies support pre-service teacher training in rural areas, no longitudinal research has been conducted to enable such training to be interpreted or modified. The efficacy of teacher induction programs into more isolated educational regions do not appear to have been evaluated apart from a quantitative validation of fewer requests for early transfer.

The concept of parental and community participation into school decision making has gained official status throughout the states. The time is perhaps right to now formalise the sharing of strategies that have been developed both statewide and nationally so as to avoid the duplication of unnecessary anxiety and to build on the successes of others.

THEME TWO: TECHNOLOGY

Consider the following quotations.

There can be instant and inexpensive inter-communication throughout the world. The libraries of the world can be brought to the remotest village, school or home. Here ends isolation, the traditional curse of rural society ...while the potential for rural revitalization is there, the realization of that potential is not inevitable (Kitchen, 1988).

Television, video, telephones, satellite communication, daily city newspapers to most towns in Australia, better roads, air travel and all the rest of the changes in the last 50 years, have meant that the concept of isolated people being 'isolated' in the true sense, or in the sense that they once lived in a era when the mail arrived only weekly or fortnightly, no longer stands (Doecke, 1987).

Many people living in rural and remote places would be quick to argue that the technological potential to 'end' isolation has not come to fruition. The Principal of the Distance Education Centre in Mount Isa reports that of the 150 families enrolled with the Centre, none receive daily mail deliveries - in fact most have a weekly or ten day service. That is, weather permitting. In the wet season some families lose mail contact for up to two months. Telephone services to rural and isolated homes also misrepresents reality. Many families contend with a manual party line shared among three or four other users while others have no outside world accessibility except an atmospheric condition dependent HF radio.

The point being made is not one of technological inadequacy, mankind has developed sufficiently advanced technology, almost beyond the limits of comprehension; rather it is a complex array of variables the combined effect of which inhibit not only avant-garde innovations but the basic items of communication from reaching isolated families. Not the least of these variables is cost. In the current economic situation, many rural isolated families simply can not afford the cost of technology.

The literature on educational technology is concerned with justifying its existence, present usage, implications for development and future directions.

Hawley (1985) established that 'based on a cost per unit of gain in conceptual development, adjunct microcomputer assisted instruction was found to be more cost effective than traditional instruction'. Computers are functionally viable in word processing, which allows the fast preparation of reports and instructional materials to be distributed via modem throughout a district; in electronic mail for communication among schools and administration; for on-line cost effective discussion with educational consultants; and in enrichening, maintaining and developing the learning process (Trueblood and Flanagan, 1984).

While computer competency and knowledge has been demonstrated in students (Marshall and Bannon, 1986), some educators in rural areas have been reluctant to fully grasp the computer

nettle. This may indicate that resistance to change is not only based on the need for training and support but on attitudinal factors. Archer (1988) found the impact of the computer on rural education has been rather small with most use based on the improvement of basic skills. 'They have not been used to any great extent to address the problems peculiar to rural education - isolation and small size' (p 1.). Barkers (1985) research however, argues that emerging educational technology (e.g., electronic whiteboards, satellite TV, microcomputers) can adequately meet curricular needs of smaller schools, thus combining the advantages of smallness with important breadth in curriculum possibilities (cited in DeYoung, 1987).

Programs designed to extend curricula into previously uncharted areas are often on the cutting edge of technological innovation. The Queensland School of the Air Satellite Trial set up in January 1986 at the Mount Isa School of the Air (SOTA) used audio, interactive video, and computer data transmission with learning materials specially developed for use with satellite communications technology (Fasano, Hall and Cook,1988). The project aroused national interest. Fritsch and Kuffner (1989) discuss adapting distance education techniques for small classes using personalised computer generated letters and computer modem transfer in tutorials. Prof. Richard Smith at James Cook University is presently instigating courses to the Torres Strait using computer authorware to write courses, store on CD Rom and access using local hardware, on site tutors and interactive audio links.

Some precautionary discussion on the use of technology has been provided by Higgins (1983;1985). He maintains that satellite communications technology has the potential to be misunderstood.

> *If material transmitted reflects political and social uniformity derived from the notion that the population is homogeneous rather than material inspired by the diverse, heterogeneous population that actually comprises rural regions, satellite communications could become culturally biased and stifling rather than balanced and enriching (Higgins 1983, p 31).*

In contrast to Higgins, Hosle (1988) questions the viability of delivering education to Schools of the Air (SOTA) and Distance Education Centre (DEC) students by satellite due to the small number and particular circumstances of the students involved.

Future directions of technological innovation seem to centre around the format of delivery of technology. Australia could have its own educational television network according to Grieg and Hedberg (1988). 'The network would be based on consortia of educational institutions, community groups and other agencies'. Kitchen (1988) and Higgins (1985) argue for multi-directional media control such that remote residents both have a voice in the media industry and the chance to utilize technology to educate those living elsewhere about their particular environment. Then, 'for the first time, remote residents may be in a position to make what they want to see (or at least have a choice) rather than just to receive it from elsewhere' (Higgins 1985, p 239).

The executive summary of Fasano's (1988) report on *Information Technology and Educational Services* states that,

> *... the set of innovative and experimental activities in rural education stands in sharp contrast with the large scale picture ... selected programs in the report show how computers and computer based telecommunications technology is used creatively to enrich the learning environment and the educational opportunities for rural students. Costs, usually high, and lack of clarity of long term commitments on the part of education authorities emerge as important issues to consider in relation*

to the future of these programs and their contribution to 'technology transfer' processes to main stream rural education.

The report concluded with three recommendations that adequately summarize the issue of technology in education in rural areas. These included,

...i). provide adequate resources to the schools and adequate knowledge and expertise to the teachers.

ii). encourage analytical and evaluation studies on the innovative and experimental programs in rural education. This will allow accurate reflections on the large investments involved in setting up activities and programs.

iii). address the 'technology transfer' issue such that feedback on innovative and experimental programs is generated and extended to the larger scale rural education (Fasano et al, 1988).

Fasano's recommendations will ensure a carefully monitored introduction of technological innovation to schools. This, however, has the potential to occur in areas represented by technologically adept administrators. If new computer and communications technology is to be widely accepted it will require either de-mystifying or else in-service education time to familiarize and train the 'technophobics' within all systems. Feedback on practical developments within schools is required on an intrastate and interstate level.

THEME THREE: EDUCATIONAL DELIVERY.

This theme encompasses five areas: equal educational opportunity, curriculum, decentralisation, service delivery, and educational models.

Equal Educational Opportunity.

A Definition. There are two typical responses to Darnell's (1981) question, "What is the purpose of equality of educational opportunity for rural residents?" The first cited by Benson (1961) is a moral justification.

> *The one universally accepted criterion of a public activity is that it affords equal treatment to all. With respect to schooling, this implies that any two children of the same abilities shall receive equivalent forms of assistance in developing these abilities (p.62).*

The second response appears aligned to the first,

> *Whether schools in forming communities provide an education comparable to that provided by schools in towns and cities arises from the recognition that students graduating from rural schools will be obliged to compete with those graduating from urban school if they are to obtain employment and be successful in the work they choose (Humphreys, 1971, p. 39).*

There are a number of questionable assumptions however, on which Humphreys' statement appears to be based. Is success in work contingent upon urban employment? Or worse, if students in rural areas tended to remain in rural areas, would that signify a concomitant devaluing of education in rural areas? Before such questions can be approached, it is necessary to derive a statement of equality of opportunity that is 'rural specific'. Darnell (1981) has done just that. His selection of eight concepts of equality of opportunity is listed below.

1. *...The foundation system concept requires a satisfactory minimum offering, expressed in money to be spent, which shall be guaranteed to each pupil. Many complex formulae have been derived to satisfy the feature of guarantee, but they are all based on the fundamental idea that certain minimums are essential for all, regardless of local resources.*

2. *The minimum-attainment concept of equality of opportunity requires that every student shall receive educational resources until he/she reaches a specified level of achievement. This approach requires greater expenditure for some students than for other.*

3. *The levelling concept requires that resources should be allocated in inverse proportion to the ability of each student. In effect, his approach compensates for shortcomings of some pupils and is typically provided in categorical compensatory programs. The*

Australian Schools Commission adopts this approach in its disadvantaged schools program.

4. *The idea of competition as an approach to equality suggests distribution of educational resources to students according to their talent. In this definition, equality is an individual focus rather than a social focus. It simply means the more able students deserve more education, regardless of wealth or parents ethnicity or location.*

5. *The idea of equal-dollars-per-pupil approach assumes there is no reason for one individual, rural or urban, gifted or handicapped, to be granted more resources than onother. Ability is not considered a reason for differential allocation of funds.*

6. *The classification definition derives from the concept that specific education programs are more suitable for students with certain specified characteristics than for students without such characteristics.*

7. *The concept of full-opportunity assumes that students may differ in their ability to learn, and every person should be given the opportunity to develop their abilities to the fullest. In this concept the cost of every individual's education would vary.*

8. *The concept of fiscal neutrality requires that a student's education should not depend upon where he lives and what his parental circumstances are. Because of its should not feature this concept is sometimes called the negative definition of equal opportunity (p. 31-32).*

In the introduction to their book *Equality of Educational Opportunity*, Miller and Gordon (1974) base their assertions on the minimum attainment concept. They state that,

> *...where what children bring to the school is unequal, what the school puts in must be unequal and individualised to insure that what the school produces is at least equal at the basic level of achievement (p. 26).*

However, because there is no single definition for rural, and because rural environments encompass different kinds of population, Darnell (1981) maintains no one concept of equality of education is suitable. His composite definition, while claiming rural specificity, is valid across all educational setting, it states:

> *...schools should provide the opportunity for every student to develop personal abilities to the fullest, regardless of the ability to learn, regardless of the ultimate level to be attained, regardless of where the student lives, and regardless of a person's parental circumstances (p.32).*

It is clear, that the value of education does not depend on locality. By accepting equality of opportunity as meaning an equality in students to learn, it matters not whether students wish to remain in rural areas, or compete for university entry within the largest city. The school's mandate remains constant.

Sameness. The OECD, SPA project mentioned earlier in this paper,

> *...drew a distinction between equality as meaning that every student should receive the same (in terms of specialised services, financial resources, curricular offerings, etc) and equality as meaning that, with the constraints of available resources, students should receive the particular opportunities and specific services they need to fully realise whatever potential they may possess (Sher, 1981, p. 18).*

Nixon (1981) labels the definition of equality as sameness, as simplistic. In the "Australian tradition of schooling, however, equality and uniformity have become synonymous" (Bessant, 1978). If this is the case "then rural schools will inevitably suffer ... because the cost of providing the same facilities to the small schools as are provided in large schools becomes prohibitive" (Meyenn, 1985).

Access to resources however is not a panacea for equality of opportunity. A number of writers report the lack of statistical relationship between per pupil expenditures and achievement (Deaton & McNamara, 1984; Humphreys, 1972; Monk, 1982). As Behrens (1978) says,

> *...differences in resource provision could not explain differences in educational attainment...the differences of country students lay more deeply embedded in the social content of country areas (p. 1).*

There is no debate that rural areas are different from urban areas. How different? That is the contentious question. The point is, if they are different finances and resources ought not be distributed equally but equitably. Darnell and Higgins (1983) make the point when they say,

> *...formulae designed for staffing and financing rural schools need to be weighted in a manner...that acknowledges the principle that provision of uniform and similar amounts of resources may, in fact, be to treat rural pupils unequally (p. 30).*

Within the context of Distance Education Beevers (1981) says:

> *...there was an attempt to ensure that there was no disadvantage to isolated children by making them equal to children in town. Correspondence schools used it as their design principle and tried hard to ensure that isolated children were given the same as town children, that their education was equal. What ought to be established is not a policy of equality but of equivalence....Distance means difference. Isolated children are not simply the same children in a different place; they are different, and the whole design philosophy needs to be different (p. 34).*

Gender Equity. Gender equity is an area requiring more research. Few references are cited due to a paucity in the literature. Holder (1982) reports "traditional values regarding females in non

traditional skill/trade areas are highly resistant to change within rural education systems". Clarke (1984) found from his survey in Gippsland, that while girls and women in theory have access to a wide range of adult education opportunities, the major perceived barriers to participation were distance, time, child minding, transport, cost, farm routine, husbands' objections, and a lack of confidence.

Such issues need to be explored in more detail and replicated in various settings.

System Produced Change. An educational policy with the potential to develop equality of opportunity through equity is the k-10 (or P-10) policy. Boylan (1988) in his research on the provision of education in the New South Wales central school, remarked that,

> *...with a flexible approach to staffing within the school, teachers with a particular curriculum expertise and interest can be used at various levels...The outcome of this flexibility and curriculum development is a well organised and structured set of learning experiences for the children as they progress through the central school (p. 44).*

Perhaps the only sure way to evaluate systems produced change is to become involved in the system. To this end, Barker (1986) suggests that rural schools be represented on task forces and study groups to insure that mandatory guidelines and requirements acknowledge and allow for differences between large city school districts and small rural ones.

Curriculum.

> *Half a century ago, Radford (1939) claimed:*
> *...it is impossible any longer to regard the curriculum as a fixed body of information passed on by tradition and uniformly imposed on all children irrespective of geographical location and other circumstances...many students of education have been impressed by the apparent need for constant 're-discovery' and re-statement of this aim in some new form. In its laudable desire to conserve what is of permanent value in our human tradition education has a fatal capacity for adopting fixed ideas and routine methods, and thereby contact with the pulsating and developing reality of life itself (p. 5).*

Design. In Australia, curriculum design is balanced on what could be called a 'see-saw' paradigm. At one end is the centralised production of curricula and syllabi by respective State Education Departments; and on the other, local school or local area based curriculum development. Radford (1939) makes the point that the 'see-saw' should never be static but in fact be capable of re-defining the balance between centralised and local curriculum development according to location and perceived need.

The present balance in most Australian states appears to change between Primary and Secondary schooling. Primary curricular policy is distributed through Departmental syllabi which are open to adaptation and change at the school and to some extent individual teacher level. Secondary schools on the other hand, individually or in groups write a subject program proposal which is generally ratified by a Government statutory authority.

Newby (1981) remarks that,

...underneath the assumptions of learning theory that guide syllabus design, lie certain practical assumptions about the way they will be used...

a) *children of similar age and level of intellectual development wil be grouped within a single class.*
b) *teachers will devise their own organisation of syllabus content to account for time allocated to subjects, individual student needs and resources available.*
c) *teachers will provide the learning activities for their students.*
d) *most children will complete the syllabus content for their school year in one calendar year.*

The extent to which these assumptions are fulfilled depends largely on the teacher and the support mechanisms available to the teacher. There has also been a realization in the last decade that syllabi should reflect developmental flexibility rather than a lock step system of objectives

A question of curricula and syllabi design that continues to encourage debate is the generalizability of the curriculum across urban and rural areas. Sher (1981) maintains that,

...an urban school curriculum is not appropriate for the needs of rural students coming from small communities rather than from cities....what's more, as long as rural schools emulate an urban model of education, ...they probably will be second rate (p. 61).

Sher (1981) lists the general features of a curriculum suited to the unique needs of remote rural communities as follows:

I) ... strong foundation in the teaching of basic skills and essential facts;
II) an emphasis on practical skills;
III) training in self directed study and the development of initiative;
Iv) a focus on the community;
v) an orientation to familiarize students with the outside world;
vI) attention to the futures of students.

A close inspection of these features reveals they are not as rural specific as Sher would have us believe. Urban curricula is also grounded in basic skills; it is sound pedagogy to emphasise practical, hands on vicarious learning experiences regardless of setting; self direction is fostered through process rather than product teaching; and the outside world is individually defined with regard to previous experiences. What Sher has highlighted is the need for a sufficiently flexible curriculum policy supported by quality, relevant resources, that is adaptive to local needs.

Local Relevance. What is the purpose of the curriculum in rural areas? Treweeke (1981) warns policymakers to,

...beware of reinforcing already existing insularities. In rural towns and isolated areas there is the difficulty of reconciling conflicting curricula demands for those who wish to enter the local, generally unskilled or semi-skilled workforce, and those who wish to

complete tertiary training and then return to their home area or else seek employment elsewhere.

In contrast to Treweeke's position Doecke (1987) and Meyenn (1985) argue that no such dichotomy exists,

> *...education needs to begin from and relate to the experiences of the student. With that in mind then, it is difficult to argue that rural students suffer educationally as long as the education they are getting begins with and relates to their environment and experiences, provided that the education then goes beyond this experience (Doecke, 1987, p. 31).*

In order to reconcile both these positions, assumptions must be made that

a) educational resources reflect local relevance and

b) subject offerings provide students with sufficient choice to enable future aspirations (such as local employment or tertiary preparation) to be met. On the former point, Sher (1985) maintains that,

> *...any schools' curriculum is inherently reductionist. It takes the whole world of experience, of information, of reality, and winnows it down into little specialised, segmented packages. The curriculum is the education system's statement as to what is vital for young people to know to lead successful adult lives. ...looking at rural school curricula around the world I have seen that it is relatively rare for rural children to see themselves in the curriculum, or to see their parents in the curriculum, or to see their community or their economy or their values or their lifestyles reflected there (p. 57; see also Easton, 1985).*

That subject offerings are more limited in rural compared with urban secondary schools is well documented (Encyclopaedia of Educational Research, 1982; Steele, 1985; Monk, 1986; Barker, 1985).

Curriculum Challenge. It appears then, that curriculum development for education in rural areas is based on two particular factors (local relevance and subject choice) that have not as yet been fully realised. This does not mean that educational authorities are not aware of such issues. To the contrary, Departments of Education are continually refining curricula offerings to schools in order that the 'see-saw' balance between centralised and school based curriculum development is capable of addressing the demands of a changing society.

The challenge for curriculum developers, based on the principle that education in rural areas is different from education in urban areas, is to develop a curriculum that,

- acknowledges there is a difference
- supports resources, both commercial and regionally produced, that reflect the culture and lifestyle of the area in which they will be used
- extends the experiences of students beyond their local community
- explores a similar basic content to equip students to successfully function and adapt in society,
- promotes the individuality of students and professionalism of

teachers and parents to address individual needs
and
- caters for the diverse range of student aspirations through an enhanced array of subject offerings (utilizing community and technological innovations).

Decentralisation.

History. Since the last quarter of the nineteenth century, and especially after World War 2, the seemingly relentless concentration of population into the state capitals and provincial cities has alarmed and disappointed many Australians (The Australian Encyclopaedia, 1988). "Decentralisation is arguably the best known of the officially sponsored and popularly endorsed responses to this concern" (p. 967). Its origins can be closely traced to some of the early efforts made by Australia's colonial administrators to define the connections between rational resource management and town and regional planning, and also to the more successful popular demands throughout the nineteenth century for a more equitable disposal of the public lands (p. 967). As policy, the most obvious challenge decentralisation has always contained is the re-distribution of people and resources from a settled fringe containing the vast majority of the population to less settled inland areas.

During the 1960's and early 1970's decentralisation was accorded only secondary policy priority (p. 968). Toward the mid 1970's however, 'decentralisaiton became a particularly attractive slogan for the rural based members of parliament, and it became political heresy to question the economics of decentralisation ' (Bessant, 1978).

Consolidated schools. The idea of using transport to consolidate small schools by bringing the pupils into larger and better equipped central schools was an educational concept born in the same era as that of decentralisation. Together both concepts form a stark contrast. Consolidation originated in 1864 in the United States but was not introduced to Australia until 1935 (Australian Encyclopaedia, 1965). It was based on a realization that central schools could provide advantages that "...were denied to small schools, namely specialized teachers, good facilities for physical education and medical treatment, more varied courses and a wider community" (p.352).

In 1968 Deetman (cited in Hind, 1981), the then Director of Education in Western Australia, explained his objective of consolidation as providing country children, apart from those in very isolated areas, with a reasonable standard of secondary education. He elucidated three phases,

1) close one teacher primary schools and bring children to a central point
2) convert the 'central' school to a junior high school
3) establish a separate high school at the central location.

Opponents to consolidation have become both more vocal and prolific in the last two decades. Hobbs (1981) remarks that "while consolidation significantly changed rural education it did not produce parity with urban schools". He cites Sher (1971) who said "the wave of consolidation which urbanised rural American schools was strongly encouraged by professional educators and administration often over the protests of rural communities who lost their schools in the process".

The most prominent advantage attributed to consolidation is cost effectiveness which grew from the theory of economies of scale. Sher (1981) defines economy of scale as the reduction of unit costs as size increases. This is a simple and much abused concept according to Sher because arguments for school consolidation tend to ignore or discount the reality of offsetting diseconomies of scale; that is, new or enlarged costs attributable to increased size of operations.

One of the problems in examining economies of scale according to Hind (1977) "arises from

no clear consensus as to the aims and objectives of schooling, thus rendering the measurement of educational output in any truly meaningful sense virtually impossible". Results from his research to determine the extent to which the cost per pupil of primary schooling in New South Wales varies with school size suggests,

> *...maintenance costs decrease with an increase in enrolment to 200. Administration and instructional cost economies are exhausted by 100 enrolment, and diseconomies occur in both areas beyond an enrolment of 600 (p. 296).*

Hind's conclusion that in sparsely populated rural areas the economies from consolidation are rather limited, is well supported in the literature (Hind, 1981; Sher & Tompkins, 1976; Hobbs, 1981; Dunne, 1978).

Present Trends. Decentralisation continues as educational policy in Australian states. Initiatives focus on the provision of higher education courses to rural areas, the development of centres for open learning (Hedberg, 1988), and the devolution of the decision making to Regions, District and school communities.

The present reality however, remains dependent on funding. Decentralised services, regardless of the consolidation issue, tend to be expensive - according to Birks (1981), 36% more expensive for rural as against metropolitan schools (in Western Australia). It seems as long as education in rural areas is discussed in monetary terms, rural schools will be different from their urban counterparts to a greater degree than they would otherwise be.

The final point on decentralisation is left to Darnell (1981) who draws a distinction between decentralisation as a tendency and as an event,

> *... decentralisation as a tendency connotes an 'allowance' of greater control bestowed upon the consumer at the pleasure of the parent agency. Decentralisation as an event connotes arrival at a specific state. The event has a defined end and a planned beginning, but the tendency has a defined beginning with no specific end other than to find that point where consumer pressure to decentralise is reduced. The granting of autonomy outright, as contrasted with the award of it in increments of indefinite size and duration, results in a different relationship between central and local rural areas. (p.35).*

Service Delivery

Structure. Educational provision in Australian states is commonly based on a four tiered structure involving Head Office, Region, District and School. In recent times Departments of State Governments have undergone substantial review procedures, the results of which in Queensland precipitated an Education Department re-structure and an evaluation of the responsibilities previously associated with each tier. Predictably, personnel within Departments that undergo organisational and structural change have to adapt to new processes, directions and personalities. The results evident in this State have encompassed a growing awareness that education is a dynamic, responsive, adaptive and fluid enterprise. 'Culminating' structures can no longer afford to be rigid but must balance education tradition with a future technology. The acceptance of a corporate management philosophy among states has engendered a devolution of decision making authority to regions districts and schools.

Services to schools. Through negotiation, regions and districts facilitate services to the community that include:

- Pre-compulsory, Compulsory, and Post-compulsory Education Programs;
- Special Programs;
- Health, Welfare and Community Services; and
- Educational Administration.

Traditionally, services to schools are provided by a multiplicity of consulting groups (e.g., Guidance Officers, support teachers, therapists, gender equity, multicultural, gifted and talented, C.A.P., aboriginal/islander, religious education, health liaison, alcohol and drugs, human relationships, road safety). It is usual that each group consults with a school community within the area of its expertise according to needs either identified by the school or through an external method of needs identification. This process, as could be reasonably assumed, is inherently capable of addressing the same need, on a number of fronts, by a variety of personnel, at either different or same day visits to a school.

An innovative method of service delivery to the school community has been adopted by one Queensland Education Region. Consulting groups are co-ordinated under a Support Service umbrella such that school communities are regarded as systems; the focus of service then becomes a systems approach to problem solving that involves consultants and school members prioritizing areas of need and then working together to effect change. Instead of a number of groups working on a number of needs, frequently replicating service, a target group of consultants and school/community members work on one need at various levels within the school structure. One important element of this approach, as Maxwell (1988) supports, is the articulation of a system's inservice offerings allowing contol to rest with the school.

Training. Morrison (1985) reports that rural living produces drug abuse, domestic violence, depression and teenage pregnancy just as frequently as does urban living. Services to support schools and rural communities dealing with these problems rely on specialist personnel. A number of researchers indicate that just as teachers benefit from pre-service training in rural education, so do support personnel providing a service to rural communities (Cole & Ranken, 1981; Horner & O'Neill, 1981). In many districts throughout the country, local professional development focuses on inducting support personnel to the characteristics of the rural lifestyle and the inherent problems associated with service delivery in rural areas. These include transportation, access to other professional networks, case load, community acceptance, maintaining confidentiality and referral to other agencies.

Programs. Three programs that bring students parents and teachers together for mutual support and sharing of ideas are mentioned. The Foster Schools Support Scheme is an initiative funded under CAP. It operates in Queensland in designated PCAP (Priority Country Area Program) areas to establish networks among schools (particularly at the administrative level) for practical support and information sharing and to utilize the experience of larger school systems and of Principals.

Jenner (1981) reports on the central resource service to isolated schools in the Northern Territory. The service aids in the production of local materials, prepares lists of books and films without words so that local vernacular languages can be added, and secures area material for its diverse lending library.

Multiple school camps and festivals are organised in all states providing the opportunity for students from rural areas to mix with other students, develop music, art and recreational skills, and allow teachers and parents the opportunity for professional inservice training.

Services managed and delivered from schools are highlighted in the following section.

Models

The educational model on which education in rural areas has usually been based is labelled

the 'one best system model' (Nachtigal, 1982). It implies that the "problem with the education system are the same regardless of where the schools are located and the solutions are equally appropriate for cities and small towns"(Nachtigal, 1982, p. 21).

Tamblyn (1975) is critical of the 'one best system model' in rural areas and is succinct in identifying weaknesses when he says,

> *... the inability of rural areas to support educational programs is readily reflected in their inadequate facilities and instructional materials, disproportionate numbers of unqualified teachers, high teacher turnover rates, lack of effective special services, higher drop out rates, inadequately prepared graduates, high unemployment rates and few taxable resources (Tamblyn, 1975, p. 1).*

The above thinking according to Sher (1985),

> *... is the dominant view of rural schooling which leads to a deficit model that focuses on what rural schools and communities lack by comparison with metropolitan schools and that emphasises strategies to 'fill in the gaps' and to compensate for all the disadvantages! (p. 58).*

The alternative model Sher maintains,

> *...can be found in a set of genuinely rural visions of education. What these visions have in common is a positive, provocative attitude toward rurality, smallness, diversity and community involvement. They see what rural schools and communities have, instead of only what they lack, where rural schools have succeeded instead of only where they have failed, and what their potential is, instead of only what their problems are (p. 58).*

A number of considerations have been outlined in the literature that, when viewed in the present context of educational provision to rural areas, provide the focus for an improved educational model. Some of these considerations are listed below:

1). *Any attempt to change the educational scene in rural areas, without concurrent effort to effect change in the social, economic and political areas of community life, will have very limited impact (Warren 1977, p. 6).*

2) *The locus of control for defining rural education problems should be returned to the community, with outside agencies playing a facilitating role not a dictating one. Also, the criteria for deciding if a problem is in fact a problem ought to be more firmly rooted in local conditions and not in a preconceived set of standards uniformly applied to all school system regardless of size and location (Nachtigal, 1982, p. 303).*

3). *Community education is seen as a mechanism with great potential for revitalizing rural education and rural society (Warren, 1977, p. 7).*

Some writers focus on the program oriented components of community education - including local resource use in programs for school age children; remedial, recreational, enrichment, cultural and vocational programs in schools; adult vocational and recreational programs; the delivery and co-ordination of community services; and the promotion of community involvement (Darren, 1977; Bloomquist, 1988; Encyclopaedia of Education Research, 1982; Farley, 1980; Venn, 1967). Other writers focus on the process oriented components of community education - which include co-ordination among groups and organisations to avoid duplication of services; needs assessment of individuals and the community; mutual ideas sharing and group problem solving (Darren, 1977; Whitfield, 1981; Australian Department of Primary Industries and Energy, 1988).

4). *Multigrade, multicourse learning centre approaches to school organisation that decouple the course/class equation and allow small schools to offer a diverse educational programs (Sederberg, 1983).*

5). *The establishment of a business partnership between rural schools and the local business community (Warden, 1986) to promote school entrepreneurial endeavours.*

Such considerations, as previously stated, have the potential to improve the present urban dominated model for educational provision in rural areas. It is not suggested that policymakers should include all the above when reviewing state education structures. Collectively however, they provide the impetus for change, to extend the strengths of education in rural and isolated areas.

Theme Three encompassed a multitude of issues and concepts that surround the delivery of education to rural areas. The dominant underlying issue, that of access, although not overtly mentioned in much of the literature, is inherent in each of the descriptor terms discussed in this theme. Equal educational opportunity presumes access to education by all sectors of the community in all locations. Equity of opportunity presumes educational justice to all sectors of the community. Access to the curriculum was seen to include local relevance and the balance between centralised curriculum production and that produced within a local area. Decentralisation and service delivery provide a framework from which access to programs and services can be delivered. An educational model developed with rather than for people in rural areas ensures access to quality education.

Each of these concepts, although invariably discussed together within research articles, have tended to attract policymakers' attention independently rather than interdependently. One of the problems of decentralisation, for example, is the provision of the appropriate resource support mechanisms that local empowerment requires to meet the raised expectations of the community and school personnel. This problem in the author's opinion does not appear to have been satisfactorily solved. Further research should aim at synthesising the interrelatedness of factors such as curricula design and service delivery structures with the devolution of control. In the current climate of Departmental restructuring the opportunity for evaluative, visionary research should not be underestimated.

THEME FOUR: RURAL EDUCATION OR EDUCATION IN RURAL AREAS

Warren (1977) posed the question, "Is there such a thing as rural education?" In 1978 Bessant followed up by asking, "Is the Australian rural community sufficiently different to warrant a different type of schooling?" Both writers would agree on the complex nature of issues surrounding such questions.

Ten years ago the literature on this topic, whether rural areas should have a discrete model of schooling (rural education) or a model grounded in general educational provision (education in rural areas) was dichotomous. Since that time educational research has tended to draw less of a distinction; rather than defend a polarised view, educationalists voice support for a generic educational model (education in rural areas) with the proviso that it incorporates many of the features one would attribute to a rural education.

It is intended to begin the discussion on this topic by examining the dichotomous viewpoint. Information has largely been extracted from two excellent articles, one by Barber, (1981) and the other a critique of Barber's work written by Evans (1981).

Education in Rural Areas	**Rural Education**
1. *A rural curriculum assumes a stable society with fixed roles and occupations. This is not the case.*	1. *General curriculum not appropriate for different people in different locations.*
2. *Rural, urban and surburban locations are heterogeneous. Therefore need core common curriculum.*	2. *Differences exist between rural and urban areas, and rural and rural areas. They should be treated differently.*
3. *Policymakers don't see the salvation of rural areas entirely in terms of a separate educational approach.*	3. *Policymakers don't deny that rural/urban differences exist.*
4. *General Education provides freedom of choice and social mobility.*	4. *Rural Education may determine the consequences for rural productivity and impart technical knowledge to rural youth.*
5. *Increasing resource quantity not positively correlated with increase in attainment. Resources distributed by formula.*	5. *Rural Education suffers qualitatively in terms of:* *- access* *- drop out rates* *- teacher inexperience* *- resources* *- services* *Equal access does not mean equal opportunity.*

6. *Granted, education in rural areas modelled on urban system which is not entirely appropriate.*	6. *General Education tends to homogenize. Applicable for urban areas but does not prepare for rural.*
7. *Need less relevant education to get to secondary and higher education (maths/ science thinking).*	7. *Education should be relevant to the local students, parents and community.*
8. *Goal of education is contribution to society.*	8. *Goal of education is rise in rural welfare.*
9. *Post compulsory training for urban/rural specialisation*	9. *Post compulsory training exacerbates problem of educated unemployed. Specialize sooner.*
10. *Decentralise secondary education through local boarding centres.*	10. *Decentralise through lower cost and more prevalent P-10 schools.*
11. *Non mobility education unacceptable, discriminatory and unfair.*	11. *Minimal literacy and elementary understanding of man and nature insufficient in the country*
13. *The themes of modernity are woven into local custom. Individuals must become estranged in some degree from tradition if they are going to participate in bringing a new society to birth.*	13. *Traditional values are inherent in rural education. Insular from the ills of the city. Change is slow.*
14. *A one system of primary education for all reveals a de facto dual system that perpetuates inequality.*	14. *Formalise dual system to provide equal educational opportunity.*

As mentioned previously the dichotomous view is one of polarity, of extremes. A combined educational paradigm focusing on the strengths of each model is supported by a majority of researchers to which the following quotations attest:

> *... we must recognize that there are historical and perhaps even genetical or theological limits to cultural pluralism which must be recognized if communities, regions and nations are to maintain some cohesion through shared concepts and experience. The polarisation of differences, whether between the fit and the handicapped, between male and female, between black and white, between life in the factory and life on the land, between the urban and the rural, without complementary stress upon what is common to each, is a recipe for intolerance, misunderstanding and conflict*

(Whitfield, 1981, p. 12).

> *... any alternative, including schooling, has advantages and disadvantages. Neither formal nor non-formal education by itself is an adequate or feasible response to the needs in most developing settings (Evans, 1981, p. 239). ...the problem facing policy makers is not one of choosing either single general systems or dualistic systems, but it is rather that of making whatever mixed system they may have work in ways which support greater equity rather than increasing inequity in outcomes (p. 236).*

Evidence cited throughout the themes of Australian content, schooling, technology and educational delivery presented in this paper, point unequivocally to the author's belief that the "education in rural areas" model of educational provision is the one presently adopted in all Australian States. While it is also the preferred model mentioned in the literature researchers have been quick to recognize the need for diversity and flexibility to be incorporated into the system.

How then, do we get from a set of education policies and practices that tend to view education as a generic endeavour to a set of policies and practices that value and accommodate rural small town culture and rural small schools? (Nachtingal, 1982, p. 302).

Disadvantage or difference. Darnell (1981) argues that,

> *...for too long urban dwellers, operating from an intrinsic belief that urban equals greater educational opportunities, and therefore a better education, have attempted to show that rural people are suffering from educational disadvantage".*

The bulk of literature covering rural disadvantage has centred around external factors such as distance, opportunities, and services offered. Doecke (1987) makes the point that,

> *...the extent rural children are disadvantaged educationally needs to be seen less in relation to external factors such as distance and facilities, and more in terms of the curriculum being offered, quality of teachers, and the relationship between curriculum and environment (p. 31).*

Doecke (1987) goes on to question the very basis of disadvantage when he says,

> *...perhaps rural disadvantage was never there - or at least not to the extent claimed....What has been identified as rural disadvantage may in fact be no different from any other form of disadvantage identified in the city or elsewhere....It is very easy to suggest that the cause of some kind of lack of achievement or opportunity is the result of where one lives, when in fact it is related to a much more complex set of features (p. 33).*

The term 'disadvantage' is rejected by Sher (1985) in favour of 'discrimination'. He maintains that, "the fundamental problems for education in rural areas do not relate to rural disadvantage but rather reflect discrimination against schools in rural communities. His basis for rejecting 'disadvantage' is twofold. Firstly,

> *...the disadvantaged label carries with it a powerful, albeit subtle, political temptation to blame the victim; thus in being disadvantaged by virtue of being rural, the only way to become advantaged is obviously to become urban (p. 54).*

Secondly, " the term disadvantaged creates a negative mind set which tends to overlook the advantages and positive attributes of rural schools and communities (p. 54).

Sher's reaction to 'disadvantage is persuasive, however his contention that governments covertly discriminate against schools and communities is unrepresentative of a more moderate literature. A less 'radical' view is espoused by Darnell and Higgins (1983),

> *Formal school systems have the legal and financial means to control education programs and they have a pool of specialists available to work on education developments. But they may have little knowledge of local conditions and needs. Conversely, rural residents may intuitively know what they want by way of education for their children but they lack knowledge of the options available to them and the skills to bring these options to bear on the issues (p. 32).*

Over time recommendations have been made in the literature that respond both to Darnell and Higgins (1983) and to Nachtigal's (1982) questions posed earlier. McLean (1981), listed six actions that enable rural community control over what Doecke (1987) later labelled external factors. To remove rural disadvantage McLean says,

- *involve the community*
- *identify existent resources*
- *ensure local control and essential delivery systems*
- *localise decision making*
- *modify the general curriculum for local relevance*

Meyenn (1985) added to the list in consideration of a different type of schooling that he maintains appears warranted in rural communities. He includes:

- *the funding of 'rural education' being weighted so that a more realistic attempt can be made to reduce inequality of opportunity*
- *the involvement of local communities in the selection and appointment of staff (referring only to teaching staff not other government instrumentalities)*
- *elements of some pre-service teacher education programs for prospective teachers who want to teach in rural areas.*
- *increased in-service education and professional support for rural teachers*
- *full consultation with a community when a school is being considered for closure and the possible re-opening of new ones*
- *incentives for teachers in more isolated areas*
- *structures be implemented at a variety of levels, that allow for comprehensive representation of rural interests (p. 70-71).*

This theme has attempted to deal so far with the issues surrounding an educational paradigm that is applicable to rural areas. The term 'rural education' is generally used in the literature as a synonym for 'education in rural areas'. The differences that have been listed however, make the terms relatively distinct. Rural education assumes an education only for rural areas, the prime goal of which is to prepare students for life in the rural community. Conversely, education in rural areas is based on a general model of education, applicable to all students living in all areas, and including a component, the size and extent of which is most important, to meet local community needs. There is continuing debate on the degree to which education in rural areas, without significant relevance to the area in which it is placed, disadvantages, discriminates or makes the recipients of the education different from people living in other areas to a greater degree than they would otherwise be.

There is also conunuing debate on the parameters of local relevance. Who decides what is appropriate to local people Sher (1985) asked. There is even more contention as to whether the problems normally associated with education in rural areas, are endemic only to rural areas. Bessant (1978) answers his own question, the one posed in the introduction to this theme, by stating,

> ***...the problem for schooling in Australia is to distinguish the real differences from the imagined, since most problems are common to both rural and urban areas...the particular adaptations and variations needed to accommodate local needs should be examined, just as much for the rural as for the urban areas (p. 130).***

Bessant may in fact be only stating the obvious. If the existing practice of educational uniformity mitigates against the likelihood of the high level of flexibility that being different necessitates (Darnell and Higgins, 1983), that practice is just as inflexible in urban as in rural areas. The reason 'education in rural areas' was selected by governments is that the one structure (the one best system) is supposed to cater for the entire spectrum of educational provision in all areas. That clearly is not the case. Local input has become almost mandatory in all areas of educational provision from the birth of new ideas and structures to their conclusion.

The final point to be made in this theme relates to what previously has not been documented in Australia. Educational researchers and policy makers may have chosen a vision for the education of people living in rural areas, but to what extent are those visions sanctioned by the recipients of that education? Do rural people want rural education, education in rural areas, or a mixture of both? What ingredients constitute an educational model that people living in rural areas (particularly parents and teachers) perceive will meet their needs?

CONCLUSION: RESEARCH

It is the aim of this section to summarize the topics discussed under the four themes presented in this paper, to comment on the scholarship found in the literature, and to list the research questions, apparent from the issues raised, that may catalyse comment and discussion in order to produce a national research agenda on education in rural areas within Australia.

Summary

The literature review presented in this paper was structured around four themes: schooling, technology, educational delivery and education in rural areas. Each theme represented a collection of similar topics that arose as descriptor terms throughout the literature. A schematic representation of the themes and corresponding descriptors was provided in Figure 1. (p 3.)

The context for the provision of rural education in Australia introduced a major methodological research concern - the lack of a uniform, nationally agreed definition of what constitutes rural Australia. The economy and economic conditons were discussed in relation to rural communities and a link was supported between local schools and local economic development.

Theme One included teachers, students, school - community relationships and accommodation. Recruitment and retention of teachers in rural areas was seen as of prime importance, particularly the need for specialised pre-service teacher training and an induction program covering school and community expectations upon the graduate teacher's arrival at his/her 'new' school. The provision of incentives to enhance teacher continuity was also discussed.

Quality and accountable education appear to simmer on all political agendas and thus the issue of student achievement, which is often interpreted as the outcome of education. It was found that although methodology in this area varies greatly, correlations between intelligence, academic achievement and place of residence are minimal.

The post-compulsory retention of students has increased steadily during the last decade and continues to do so in all Australian states. Such increases place strain on the provision of specialist services to rural areas. The support for both indigenous students and students with particular needs (gifted to disabled) was an area identified as requiring more intensive research.

The interaction of professional educators with parents and community members has been formalised within the government school system in the last several years. Collaborative structures that focus on local input have been mandated in some areas (e.g., school development plans) and seen to be lacking in others (e.g., school closures).

Rural lifestyle and rural school characteristics have received considerable attention throughout the literature. Human resource interactions based on open communication among teachers, parents, students and the wider community were generally considered the strengths of the rural school. Limited curriculum offerings and inadequate resource provision (human and material) seemed to constitute the weaknesses.

The accommodation of students in boarding facilities highlighted the reality for isolated families of the need to provide a secondary education away from home. The position adopted by the ICPA was discussed in relation to the options available for secondary education.

The theme on technology began with a rejection of the myth that technological communication has all but dispelled isolation in the bush. Innovations of considerable utility are being trialled throughout government departments and while wide spread benefits may accrue in the longer term, basic communications in isolated areas and electronic classroom applications in schools have yet to reach fruition.

Theme Three encompassed a multitude of issues and concepts that surround the delivery of education to rural areas. The concept of equal educational opportunity is strongly debated throughout the literature as providing an even match of education provision (including staffing ratios and resource allocation) between urban and rural areas. The term 'equal' however, assumes a

sameness in need in all locations. Not only are urban areas different from rural areas, each area is different within itself. Schooling provision therefore should be visualized on the needs of local areas, and as such require an equity rather than equality of educational opportunity.

Access was found to be a key underlying feature throughout this theme. Access to the curriculum was seen to include local relevance and a balance between centralised curriculum production and that produced within a local area. The exact balance to be struck is dependent on the central authority's policy on decentralised decision making to school communities. No one has argued for total school autonomy over curriculum. The issue is the extent to which schools are empowered to modify a common curriculum framework, and the level in the system, at which such decisions can be made.

Support services to schools it was suggested, are most effective when they are accessible, co-ordinated and trained to view the school as an integrated system. Systems level change then, is based on a team approach to collaborative problem solving. Access to quality education is provided through an appropriate educational model that recognizes the strengths and weaknesses of the area into which it is introduced. Two such models were discussed in Theme Four.

The provision of education to rural areas in Australia is based on the educational orthodoxy of a generalist rather than specialist model. 'Education in rural areas' in contrast to 'rural education' has been accepted as the form of generalist education provision in all states. The term 'rural education' as outlined in Theme Four, delineated a model that was rural specific. Its prime goal being to prepare students for life in the rural community. 'Education in rural areas' on the other hand, is founded on the concept of a one best system of education for all. Neither model, by definition, is totally appropriate in any setting. 'Rural education' discriminates against the tertiary bound student and the student who does not appreciate or acknowledge the rural lifestyle. 'Education in rural areas' claims generalisability without necessarily adapting to local conditions.

What is starkly obvious throughout the literature, and increasingly present in Australian education policy is the need for a basic, common curriculum framework that is supported by locally relevant resources and flexible enough to adapt to local community needs and expectations.

What is not obvious is the extent to which the practitioners of education, the teachers and parents, sanction the relative components of such a model. Further research is required in this area.

Literary Scholarship

'Educational research in Australia, following developments in other parts of the world, has passed through several stages' (The Australian Encyclopaedia,1983). While these have been mentioned in various historical documents, the stages of research into rural education in Australia are less clear. Tomlinson (1986) in his paper on *Issues and Research in Australian Rural Education* has argued that rural education research began with William Radford (1939) in his book on *The Educational Needs of a Rural Community*. Few would disagree.

The scholarship on rural education both in the United States and in Australia since Radford, has been relatively underdeveloped (DeYoung,1987; Helge,1986; Stephens,1985). The latter author goes on to say that 'the literature is meager and much of it lacks sophistication' (Stephens,1985:167). Explanations for research paucity in rural education Stephens (1985) maintains, are a reflection on the educational profession generally and also peculiar to rural education. He offers seven lines of explanation for this existing state.

> *... 1. the long standing lack of appreciation for the demonstrable difference between rural and urban schools;*
>
> *2. rural education has generally lacked the appeal in the academic community comparable to the excitement of urban education;*

3. there is not at present a large number of professionals who have devoted their careers to the continuous study of rural education;

4. there historically has been little networking in the professional and research communities, especially at the national level;

5. unlike urban education, rural education has not been the focus of intense concern in the policy communities because there has not been a widespread perceived crisis in rural education comparable to the perceived situation in urban schools;

6. confusion concerning the domain of rural education has led to a lack of consensus concerning the foci of research that should be conducted;

7. finally, the relatively late emergence of National Research Clearinghouse Organisations that in Australia have tended to maintain a broad focus (e.g., The Australian Council for Educational Research). The Society for the Provision of Education in Rural Areas (SPERA) and the Rural Education Research and Development Centre are more recent organisations whose impact on research in rural areas will continue to grow annually.

Research that has been conducted in rural education in Australia has a number of common features. It tends to be well presented using methodology that is either quantitative or qualitative. It does however follow the particular interests of published researchers. That is, the research is 'ad hoc'. Very little has been developed in any particular area following a state let alone national long term research agenda.

Rural education research, apart from being of interest to a small number of Australian writers, each of whom develop their own research agenda, does not appear to have a philosophic foundation. While research in curriculum areas can be identified for example, as relating to certain philosophical positions, the same can not be said for research conducted in rural education.

Any state of the art review on a section of research literature has limitations. This paper has attempted to highlight the issues that have been identified by research published in the area of rural education. One limitation arose due to the descriptors that were initially used to search various databases. Because 'rural education' was held as a main descriptor, any articles published in non-related fields but actually pertaining to rural areas tended to be missed. It is accepted that considerable recent research has been undertaken in aboriginal education and in the education of women and girls (James,1989 *Women in Rural Australia* ; and CSC,1987 *The National Policy for the Education of Girls in Australian Schools*) are examples. The fact that few such documents are recorded under rural descriptors does not lessen their importance. It does however highlight the urgent need for a national co-ordinated clearinghouse on research in rural areas in general and rural education in particular.

Research Questions

1. What constitutes rural Australia? An agreed definition must be capable of quantifiable analysis.

2. What is the relationship between rural, sparsely populated, isolated, provincial, urban and suburban?

3. What services ought to be provided under the umbrella of Distance Education? How does Open Learning differ from Distance Education?

4. How does local economic development impinge on the provision of education in rural areas?

5. What is the local schools role in terms of community economic development?

6. What steps are necessary to recruit quality students into the teaching profession?

7. Are the attributes of a potential quality teacher discernible at the pre-tertiary stage?

8. How is continuity of rural teaching service extended?

9. How is tertiary institution commitment engendered to establish pre-service training in rural education?

10. What are the curriculum requirements for a pre-service course in rural education?

11. How are graduate teachers suitably inducted into rural areas and what forms the content of such programs?

12. How do individual learning styles impinge on rural pedagogy?

13. How do local attitudes impinge on pedagogy and what actions should be taken to address these attitudes?

14. What educational provisions most effectively cater for cultural and gender equity.

15. Based on an appropriate definition of rurality are there significant differences betwen urban and rural secondary school retention rates? What factors contribute to any difference?

16. What is the nature, area, and extent of school - community participation?

17. What is the proper amount of decentralisation of authority and devolution of control to local communities in relation to the education of their children? Who is legitimately empowered to decide what amount is proper?

18. What are the states and federal funding priorities for the secondary education of isolated students?

19. What are the directions of technological innovation at a national level? What steps are required to co-ordinate inter-state networking on technology?

20. Is equity of educational opportunity attainable across locations? What major steps would be included in an action plan that would facilitate equity of opportunity within five and within ten years?

21. What are the directions of curriculum design for the future?

22. Is the present model of service delivery to schools and the community meeting client needs? If not what changes are warranted?

23. Is rural Australia sufficiently different to warrant a different type of education? By what criteria would a 'different' education be developed?

PRIORITIES FOR FUTURE RESEARCH

1. What are the research priorities for future research into education in rural areas?

- ***rural definition***
- ***teacher preparation***
- ***curriculum design***
- ***community participation***
- ***access to services***
- ***secondary education to isolated students***
- ***educational provision to facilitate gender and cultural equity.***

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PART II

"THINK TANK" PAPERS

AUSTRALIAN RESEARCH INTO RURAL EDUCATION

The Hon. Paul Braddy
Minister for Education,
Queensland

I am very pleased to be able to join you for this important conference on research into rural education. I would like to congratulate James Cook University and the Rural Education Research and Development Centre for the leadership it is providing in this field, which is so significant in Australia.

Rural education Queensland is defined by the Commonwealth Schools Commission Report *"Schooling in Rural Australia"* as being all of Queensland excluding Brisbane and the Gold and Sunshine Coasts. Nearly a third of all Australians live outside the major urban areas. Australia no longer can be divided into the city or the bush. There is now an important third dimension to Australia's demographic picture - the provincial cities. There are cities in Queensland such as Townsville, Mackay, or my own home city of Rockhampton. Interstate there are cities such as Albury in N.S.W. or Warrnambool in Victoria.

According to figures issued by the Australian Bureau of Statistics, these are the growth areas in Australia. The population of the capital cities is declining, and the population in more remote rural areas is also declining. People are moving to the provincial cities. This makes research such as yours important. Traditionally, education in Australia, having to cover a widely-spread population, has been concentrated in the capital cities.

Yet this is changing. In the higher education field alone, 20 years ago, there was only one university in Queensland, and that was the University of Queensland. There are now five universities plus two university colleges, and only four of these seven institutions are in the metropolitan area.

Education planning in the provincial cities is of the utmost importance. The application of modern technology, especially in communications and transport, has meant that small businesses are able to start up in provincial cities where land and resources are less expensive. As technology becomes more important in the workplace, so education also becomes more important.

The education concerns of rural Australia are, however, not confined to provincial cities. Some of you may have heard me speaking last Thursday night to a Conference on Gender Equity here in Townsville, at which I outlined my intention to have a social justice strategy in the Education Department. One of the fundamental principles of this strategy is access to educational services. In this context, the needs of non-metropolitan Queensland need to be addressed very closely.

I am conscious of the need to ensure the standard of education in remote areas is comparable to that of more populated areas. Problems faced by the education system in remote areas include lack of specific preparation of teachers for rural school appointments and the recruitment and retention of qualified staff in rural schools. There is also the problem in rural schools of teaching effectively in subject areas where there is a general shortage of teachers, such as in music, art and languages. A further difficulty is the high attrition rate of rural teachers, which can be up to 50 per cent annually in some remote areas.

One way of addressing these problems is through enlarging the pool of people who want to teach in such areas. The vehicle we will use specifically to address these problems is the Remote Area Incentive Scheme.

Currently, one of the major reasons why some teachers are reluctant to teach in these areas is that living is simply more difficult in these areas. What we are endeavouring to do is make life easier for teachers in remote areas, and this will be done through providing either a cash or a non-cash benefit.

If more teachers are available to teach in these areas, then the standard of teaching is bound to improve. Ideally, teachers and principals should be staying in remote areas for a longer period, so there is greater continuity in the education of the children. The Remote Area Incentive Scheme is one way of making the teacher's decision to stay in the bush an easy one.

I stress that this is an exercise based on remote areas, not simply areas out of Brisbane or the provincial cities. The money will be targeted to specific schools where traditionally it has been difficult to get staff.

Rural education is very much about access and equity, and increasing the number of people available to teach will result in increased access to better quality teaching. But rural education is also about economics, and it is very much in our interests as a state to promote education in rural Queensland.

The 30 per cent of Australians who live in rural Australia are engaged in a wide range of occupations. These include industries like mining and agriculture, which still produce more than 8 per cent of Australia's exports. They also include industries like fishing and tourism which have a major role to play in economic development. The people working in these industries, and those providing the supporting infrastructure in rural Australia, represent an enormously important resource to the economy, which we simply cannot afford to neglect. The development of an appropriately trained and educated rural workforce offers significant economic benefits to the whole nation.

These benefits will come from more efficient, productive and competitive industries. There will also be benefits in maintaining in rural communities some services, industries and employment opportunities which make rural Australia a better place to live and work.

Some people in rural Australia also have special educational needs, and addressing these needs is a matter of equity.

Aborigines and Torres Strait Islanders living in remote communities in Northern Australia are isolated from a whole range of services we take for granted. Their educational services must address future needs as well as those generated by years of social and economic disadvantage.

Another group with special needs is rural women, who have little access to appropriate health care and training and employment opportunities. In many cases they may carry extra responsibilities for the education of their children, and managing the finances of their family businesses.

The needs of parents who are home tutors must not go unmentioned. Their contribution must be acknowledged and commended. I consider this group the quiet achievers of the education system. As the report *"Schooling in Rural Australia"* states, these parents may often feel unable to provide adequate supervision of the child, due to lack of knowledge of subject matter or to lack of awareness of teaching methods or strategies. They may also feel that the home tutor role and the parental role are to some extent in conflict, especially in the small social world of a remote property. Home tutoring may also conflict with other responsibilities of the parent, such as assisting the necessary management and other tasks on a family farm. Conflicting responsibilities, as well as inadequacies in the home tutor role, can be especially stressful if the child studying at home has a

disability or learning difficulty. Their needs, too, need to be addressed in the context of equity.

Girls in the rural education system also need special attention, as the normal problems they face in the education system can be further compounded by geographic isolation. There are, for example, not as many female as male principals to be found in rural schools. There may be few community resources to encourage girls to look beyond traditional or stereotyped career choices. With restricted role models of women in non-traditional occupations, old stereotypes are consistently reinforced and teachers face a difficult task in broadening a student's outlook on careers. Officers of the Equity Issues Branch of my Department, are endeavouring to promote activities which ensure that the sort of equity principles which are being adopted in the rest of the Government, and for that matter, are in keeping with the broader community thinking about women in our society, are applied to rural education.

There are also some children in isolated areas who travel long distances daily to their nearest school, and others who have no access to a local school. So there are pressing social needs for improved delivery of educational services to our rural community at all levels.

Distance is the largest obstacle when delivering education to rural areas. Yet distances are becoming less of a hindrance. I feel there is an inverse relationship between technology and distance. As our knowledge and use of technology increases, the distances which have played such a significant part in our history become less of a barrier. My presence here tonight is an example of technology's increasing supremacy over distance. We must be imaginative in our approach to rural education, not least in how we will use technology itself. Let me give you an example of how it could be used.

One aim that we have as a Government is to have 20 per cent of Queensland children literate in a foreign language by the year 2,000, but our problem now is the supply of specialised teachers. One possible solution we will be trialling in Queensland schools involves teleconferencing, with one teacher sitting in a room being broadcast to pupils hundreds of kilometers away. It is a situation where technology makes available a real interaction between the teacher and the students. With the equipment in place, it is possible also for teachers to undertake in-service training, and as a result, their teaching skills will be upgraded.

This method of teaching foreign languages has worked well in other states, notably South Australia, and we will be watching this method very closely to see how effective it is and what any potential problems are. Nevertheless, it strikes me as an area in which we can make creative use of technology for the benefit of the children of rural Queensland.

The Federal Government has recognised the importance of rural education and training by funding a range of initiatives aimed at improving schooling, improved industry training, improving access to programs for rural women, and establishing distance education centres.

Providing adequate and appropriate educational services to this highly distributed and diverse population has always been a testing problem. It has, however, stimulated some remarkably innovative solutions, like the Flying Arts school, the Itinerant Teachers programs and Distance Education.

In Queensland, where the problems of decentralization are most acutely felt, the challenge of rural education has produced an array of distance education programs and activities which are a model for other states and countries to follow.

Let me talk a little about our distance education programs in Queensland and their future direction. Distance education is the successor to other schemes in rural education such as

correspondence school and school of the air. What we are trying to do is provide children who are unable to join a mainstream school, with not only a core curriculum, but also more choices in the subjects that they can study. One area that is being developed is computer software, which has the advantage of being more easily updated and therefore more relevant. At Charters Towers and Longreach Schools of Distance Education, all year six and seven students have been provided with a personal computer in a trial to allow a range of computer-related subjects to be undertaken. This is only one way in which we are using technology to improve education in the bush. We are not using technology for the sake of being modern or gimmicky, but rather, because it is an effective educational tool.

Officers of the Department of Education are currently looking at the state of distance education in Queensland. The loss in the recent flood in Charleville of broadcasting facilities was a severe blow. However, we have been able to obtain the use of another transmitter and I can assure you that facilities at Charleville will be rebuilt so that the whole southwest corner of the State can be serviced.

Higher education is also more accessible to people in rural areas. The Federal Government has rationalised the number of principal distance education centres in Queensland at a higher education level to two - one in Toowoomba and the other at Rockhampton. These rural centres are far more sympathetic to the problems faced by long distance than a metropolitan-based centre would be.

We will also be opening 40 open learning centres throughout the state, and the rate of progress in opening these centres is encouraging. They will be small centres equipped with modern learning aids such as computers, modems, facsimile and video equipment, and students of distance education will be able to use these centres to help them in their studies. Several of these centres will be located in the Torres Strait area to give particular help to Aboriginals and Torres Strait Islanders.

From all this you can see that it is not only the children of those living in distant rural properties who use distance education facilities - indeed, they only account for about 40 per cent of the users of distance education - but also sick students, travelling students such as the families of the Showman's Guild, students living overseas, and adults seeking to re-enter the education system.

This open learning network project, with $4 million of state funding, aims to exploit new communications technologies to extend access to higher education in a coordinated way across the state. An exciting feature of this project is the strong commitment to self-help which is displayed by rural people, and the vast array of local ventures, sometimes individuals offering careers advice and information from their own premises, which form part of the distance learning network.

In this context, I want to express my admiration for the strong community support which the Rural Educational Research and Development Centre has generated. The need to transfer expertise and knowledge from higher education into business and the wider community is well understood. It is pleasing to see here a lively partnership of University and community addressing an issue of real concern to the local community.

Policy makers depend on expert advice to make and implement policies which are relevant, up-to-date, and solve real problems. I welcome the contribution that you, as researchers, have to make to our understanding of the educational needs of our rural communities.

Education is not, however, the province only of experts. It belongs to the whole society, and I challenge you, in this learned conference, and in your on-going work to seek and listen to the views of rural Australians about their needs and concerns.

I also challenge you to look at rural education, not just as a need or indeed, a right, but as an investment in Australia's economic future. Quite apart from each individual having a right to a maximum personal development, as a society we cannot afford to let the potential of individuals be under-utilised, and hence have a less efficient society than we might.

I hope your conference will produce, in addition to stimulating debate and interaction, some strategies for further research to identify needs, and some real problem-solving solutions. I look forward to the contribution this Centre and this Conference has to make to the process of setting priorities in education generally and rural education in particular.

May I wish this Conference, and its hosts, the Centre for Rural Educational Research and Development, every success.

OPENING OF "THINK TANK"

Pearl Logan

I believe that State and Federal Governments are sincere in their endeavours to provide equality or equity of educational opportunity for all children.

Each State of course sets its own programmes, and across Australia Governments, departments and individuals have done some excellent work in promoting quality education to rural and remote areas. However because of the nature of the problems it has been difficult, in fact well nigh impossible, to gain knowledge of what the projects and the solutions are . We have been reinventing the wheel, and setting up another committee of enquiry, for some twenty years. It was not until the crises in the rural industries of the late 60', and early 1970's that the formation of the ICPA forced the Government to set up an all Party Senate Standing Enquiry, to investigate all facets of education in rural areas.

This Enquiry spanned three governments and was the first comprehensive research, at a national level, to identify the special problems associated with providing services to remote and rural Australia.

Until that time there had been a fairly widespread opinion that living in the country was a matter of choice, and those who did so must accept the advantages and disadvantages. The findings emphasised the fact that it is essential that people must live and work in the rural areas if the resources of this great country are to be developed. It is a fact that the agricultural and mining industries are the chief income earners for our overseas balance of trade, and are responsible for the high standard of living which we, in this lucky country, take for granted. Also, all manufacturing industries are directly based on some primary industry - the copper refineries, clothing whether wool, cotton or synthetic, even the computer chip made from the silican sands of the Peninsula.

If we are to stop the drift of population to the cities, it is essential that the family unit be kept intact. To keep women and children in these areas we must deliver services, particularly education, and at a cost that is reasonable, because education is the single greatest cost for families whose children must live away from home, at whatever level, to obtain their education.

Probably one of the factors we tend to overlook is differing attitudes of people from different countries. I remember being in Whitby, in north east England, and speaking with a most interesting man, who told us that he was widely travelled, and certainly was well read. It was not until we had chatted to him for some few days that we realised that he had never been more than 50 miles in any direction. Some people tend to live their whole lives in one area, without any desire to travel. Thousands of babies travel much further in the first week of life. As I understand it, unless there was a major crises, there would be little likelihood of the crofters from the Shetland or Hebrides moving the whole family to another island or county. Much the same applies to families of the Torres Islands. Islanders from Murray, Darnley or Yam, for example, would not easily relocate.(I do not mean the young people travelling away to be educated or finding work). However, on the mainland of Australia, as the economic climate changes, it is normal practice for families to move widely in and out of the rural areas to provincial towns and cities.

I believe that the researchers and other dedicated people here today have a twofold problem. One, to define ways of delivering educational services to remote and isolated areas, and secondly, to ensure that they are of such cost and quality that families are encouraged to remain in the rural areas. We need to entice migrant families away from the southern capitals, so they bring their skills

to the rural communities.

Again, with the advent of the computer, managerial staff and other highly skilled personnel are being moved from our country towns to the larger cities. Replacing families who leave because their children require further education, is costly to business, but the loss of these people to a small community, has a drastic effect on the social and cultural life.

The James Cook University has gained recognition at national and international levels for its contribution to rural education. We have been fortunate in attracting dedicated staff. We established the Rural Education Research and Development Centre in 1986, with Professor Ted Scott, then Assistant Vice Chancellor, as our Acting Director. Professor Jack Walton, with his wife Barbara moved to us in August, last year.. Such has been his contribution, that the Centre is functioning well and, more importantly, we have succeeded in bringing all of you together, so soon..

Professor Ted Scott has always believed that a "Think Tank" such as this should be held. It is vitally important. that we bring together, from across Australia, those people who have made a significant contribution to Distance education. Having accomplished this, we know that you, with your specialist knowledge, can review and evaluate the work that has been done, and establish priorities that will have significant influence on the academic and policy initiatives of the next decade.

I would like to pay tribute to Associate Professor Henry Crowther, who is not able to be with us today. It is a great personal sadness to me and those who knew him so well, as Henry gave us all so much encouragement. He had first hand experience with education in rural areas, and has made such a significant contribution in research and publications, as well as developing the extended campus at Cairns. We are honoured that he has donated his work to our library.*

I believe it is of paramount importance that this National Centre assumes a responsibility for the collection and distribution of information. Nowhere in Australia is there a comprehensive and authorative collection or library of research and other publications related to education in rural areas. One of our goals is the acquisition of such a library, so that the Centre acts as a clearing house or focus for the work which is done in all parts of Australia. It has the potential of assuming world renown and would provide information for Governments when legislating on these issues.

We are raising the money to establish the Chair from the private sector of the Community. We have experienced great expense over the last twelve months as we have renovated, airconditioned and furnished "Duncragan, on Cleveland Terrace," and restored some of its former charm. I hope you will all visit the Centre during your stay with us. It had been closed for twenty years, and this work was necessary for the comfort and well being of our staff, and visiting personnel, but our priority is to assist in providing quality education and the special delivery of services,in this age of technology, to all who live in rural Australia.

It is just 18 months ago, that Dr David McSwan and myself sat down one Saturday afternoon to design our brochure for the Appeal for funds, which Mt Isa Mines launched for us in May of last year. I wanted to stress the fact that our Appeal was definitely associated with education in the rural and isolated areas. When designing our logo, I wanted a windmill to suggest water as the life blood of our dry continent, the swinging telephone line to stress the importance of communications, the dish to give hope that technology would help to overcome some of the problems of distance, and the browns and reds of the overtones to depict the inland of this sunburnt country of ours. David defined the aims, and I remember we had long discussions as to whether to stress education in rural areas, which it is, or "rural education" which is so much easier to say when words are vital to cost and printing space. I was so pleased and interested to open the excellent paper prepared by our visiting research fellow, Steve Clark, a "State of the Art", to find that with no discussion, he had

used the same headings and themes.

Ladies and Gentlemen, this is a very real opportunity we have today to provide a benchmark in Australia related to current and previous research. Throughout the Western world issues of education in remote and isolated areas are assuming social and political significance. With your dedication and experience, I am confident you will make a major contribution towards ensuring that practical and worthwhile initiatives are defined to assist in providing equity of educational opportunity for all who live and work in rural Australia.

I have much pleasure in declaring this Conference open.

* As many people may have heard, Henry Crowther died on Tuesday, June 26. Whilst this was expected, it was very sad news to all who knew him well.

RESEARCH PRIORITIES IN RURAL AREAS

Jack Walton

Background

It would appear that research in rural areas has only attracted rather spasmodic notice from governments. The Centre of Education Research & Innovation (CERI) sub branch of the Organisation for Economic Co-operation & Development (OECD) did have an interest in this area but as one of their senior officers, Mr. G. S. Papadopoulous, stated in a letter to me recently "Rural education, I am afraid, no longer features as a specific activity in our program". In Australia the funding for the National Centre for Research and Rural Education in Western Australia was terminated in the mid eighties. In America various laboratories funded by the Ford Foundation exist but there appears to be no national cohesive approach to research. The laboratories anyway appear to be more concerned with development than research. It may be that in Australia, because of the interest of both Federal and State governments in the late eighties and today, that the climate is more appropriate for the development of research in rural areas than previously.

As the 'State of the Art' document indicates, research in this field appears to have been rather spasmodic possibly to some extent atheoretical and possibly in certain cases, repetitive. After the demise of the National Centre at Perth there has been no unifying force supporting any network of researchers.

Another problem raised by the 'State of the Art' document is the semantic one which, hopefully, we will grapple with during this conference. Should we be designating the focus of our activities as rural education or education in rural areas. The policy implications will vary dependent upon which of these descriptions we support.

The Nature of Research

Newman in the *Idea of a University* emphasised that the most important function of a university was teaching. Since, particularly, the Second World War it is the research function that has been emphasised. Promotion for academic staff depends upon the number of research papers that they have written. Sometimes this has resulted in the trivialisation of research, researchers speak to other researchers through their research papers, research becomes more esoteric and more difficult for the lay person to comprehend because of the language used. These points are not made in order to demean research but rather to suggest that we should be clear that the purpose of research is a clarification of real problems.

It is important that we establish a positive link between researchers and lay people. Otherwise misunderstandings accumulate and the non researchers become very sceptical about research results. Teachers could be in this category. It should be understood that research does not always provide immediate answers. The expectation that it should often results in disappointment and that scepticism that is mentioned above. Research often illuminates problems rather than providing that immediate answer. It is important also to remember that research should not be haphazard but concerned with adding to cumulative knowledge and also, particularly in an area like education, "that it is carried out across the many disciplines, and that it is essentially multivariant in nature" (Hussein, T. & Postlewaite, N. 1985:4307)

The Prioritisation of Research

This 'Think Tank' has as one of its main objectives the listing of research issues in the rural field in some priority order. In making such a list it seems important to bear in mind the following questions.

1. Is the issue or problem concerned capable of being researched?

2. Has the problem or issued been researched before?

3. Can the issue or problem be resolved by administrative change rather than research?

4. What kind of research is appropriate to the issue of problem outlined - basic, applied or developmental?

5. Can developmental activities be regarded as research or are they the results of the outcomes of previous research? Research in the field in which we are interested goes beyond the school classroom - it is concerned with adults as well as with children. It is concerned with areas which impinge upon education - the economy, population fluctuations and industrial development.

6. Possibly arising out of the previous statement it is important to emphasise the cross disciplinary nature of education research in this field and the importance of working together with researchers from other disciplines.

7. It is very important that researchers in deciding priorities should not go it alone but should interact with the users of research.

8. When deciding priorities for research in this field it is important to emphasise the need for setting up an appropriate researcher user network.

In preparing for this 'Think Tank' we have tried to keep the above points in mind. Obviously, we may not have been totally successful. It is the process of interaction at the conference which is vital - interaction between members of the 'Think Tank' and speakers and interaction between each other at the working groups. It is this process of inter- action in the working groups which will form Part III of this Report.

STATE OF THE ART

Steve Clark

Formerly a PhD student at James Cook, Brian Cambourne is best known in education circles for his work on literacy. He opened the 11th Australian Reading Association Conference in Brisbane by asking what had changed in the twelve months since the previous conference and what had changed since the conference before that. One may well ask what has changed since previous conferences on rural education research.

Derek Tomlinson, at the first SPERA conference in 1986, spoke of a feeling of deja vu. Topics arise on conference agendas from year to year - are discussed in various formats at different venues - but basically use the same dialogue.

Jonathan Sher, internationally well known for his work in rural education, argues forcefully that rural education is the poor brother of urban education - that governments actively discriminate against educational provision in rural areas. He drew an analogy in his wonderful farm yard story of rural education the important but forgotten entity and the three legged pig.

> A visitor arrived at the farm house and while parking his car noticed a three legged pig in the farm yard.
>
> "What happened to the pig?" he asked the farmer.
>
> "That's a very special pig", answered the farmer. "Only the other day I was bailed up by a snake and the pig, aware of my plight, ran over and chased the snake away".
>
> "How incredible", remarked the visitor.
>
> "That's not all", the farmer added, "we had a prowler around the house last week, but thanks to the pig's tapping at my bedroom window we were able to chase him away".
>
> "What a remarkable animal", said the visitor, "but tell me, why has he only got three legs?"
>
> "Well", said the farmer, "such an important animal as that - you can't eat all at once!"

Has anything changed in the ten years since Sher related that story? Is rural education still the poor brother of urban education?

The message obtained from these three writers relates to what I call research viscosity. It is as if research in rural education in Australia is held up in a funnel flowing through in dribs and drabs. What does flow through acts like ink onto blotting paper - unrelated perhaps even isolated idiosyncratic research with no apparent common direction. I'm not saying the research is poor quality. Much of the research undertaken in the area in this country is excellent.

There has never been, however, an agreed national research agenda on rural education in Australia.

This conference, I believe, has three aims.

Firstly it is not just about the 1.2 million students and the five and a half thousand school

communities estimated in "rural Australia" - it is really about the 10,000 school communities and the three million students and all the adult education programs and institutions throughout the nation. It is also about business, industry and government. Rural education is not an island unto itself. We are not just talking about the schooling of Billy Smith who lives out west. We are concerned with Billy Smith's teacher, his parents, peers, community members, local industry and all the inter-related variables that constitute the total educational provision for Billy Smith.

You have come here with views on rural education which you consider important - views you may wish to share both directly and indirectly. I believe it is necessary to put your views into the big picture just as it is necessary to put this paper into the big picture. There is nothing new in this document - it has all been said before. Unfortunately, we had to contain the size.

The second aim of this conference is to reach agreement on the cohort of research, the research contained in the top of the funnel. Research in various areas has reached certain points. What research now needs to be done in these areas and in new areas identified either from this conference or from other forums to go beyond these points? What are our research priorities? - Thirdly, we have an opportunity to manage the survival instincts of researchers and institutions. The system presently rewards individual institutions and researchers for independent research output. The opportunity we should create is to develop collaborative networks among interested individuals (and not just academics) in order to share our expertise and our resources. We must minimize empire building. In that way we may be able to reduce the compartmentalisation of research.

The structure of the literature review was based on the four themes that can be seen in Fig. 1. In the introduction the Australian context was given under the headings of "Demographic Features and Key Terms". Theme one looked at schooling and all the issues that are involved with schooling, for example - teachers, students, school community relations and the issue of accommodation or boarding arrangements. Theme two looked at technology. It was recognised that technology is a very pervasive theme. It has implications for all the others. It was dealt with alone because it is of significant importance in its own right. Theme three looked at the delivery of educational services and under those headings were included - equal educational opportunity, the curriculum, decentralisation, service delivery and educational models. Theme four looked at the dichotomy of rural education or education in rural areas. The review was concluded with a summary, a comment on the literature and a number of research questions.

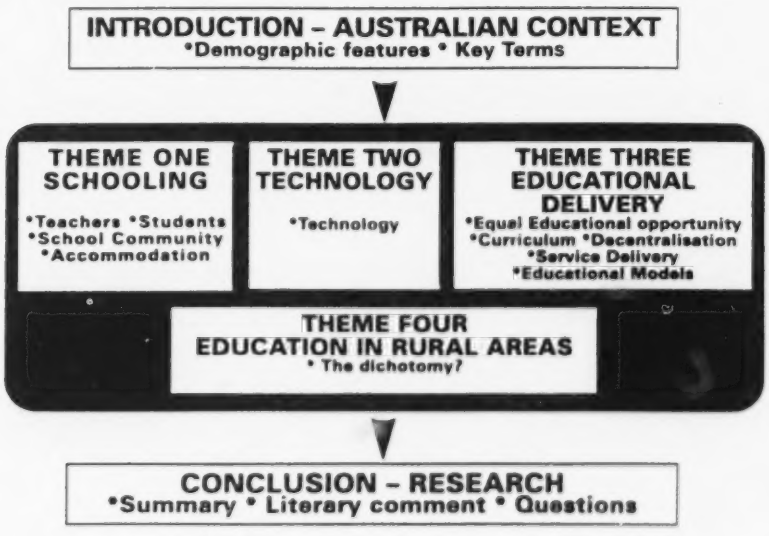

Figure 1

BEST COPY AVAILABLE

If we look now at Fig. 2 - the Australian context; the first heading is Demography. It was found that the economic problems in rural areas have received much media attention lately. Factors such as prices, access to markets, availability of transport, extension services and research all have a part to play, as does drought and more recently flood. The fundamental impact education in rural areas and local development have on each other is well accepted. The exact relationship and dimensions, however, are equivocal. From the key terms in the literature I would like to highlight two. The first one is Rurality. We are not sure exactly what rurality is, researchers have been idiosyncratically creative in producing definitions of rurality. I think we need to look at how rurality is defined. Is it perhaps, a perception? Are those people who consider themselves to be rural more rural than those people who are categorised by some definition. It doesn't matter if we look at rurality as a perception, or we look at it in any other terms the final definition must be quantifiable. The definition has very poor utility if it is not open to statistical analysis. The second term is Distance Education. We are now very much reconsidering our notion of distance education, and taking a much broader look. Not only is distance education reliant on the print media, we are now moving into an open learning framework of distance education.

THE AUSTRALIAN CONTEXT

Demographic - education / development

Key Terms - rurality
- distance education

Figure 2

Fig. 3 highlights the first theme of Schooling. Under the first heading - Teachers - was recruitment and retention. It was found that teachers are reluctant to accept rural transfers basically due to isolation. That includes isolation from family and friends and isolation from all the cultural activities that are not available in rural and remote locations. Teacher retention means continuity of service to children and parents in the community. Teacher retention has been looked at under various incentive schemes, incentives have been on the agenda for many years and only now do they seem to be coming to fruition. As far as training is concerned there is no doubt that the pre-service training course could be five or six years long. If we included all the things that researchers and policy makers would like pre-service teachers to have included in their course we would be seeing teachers come out as young parents. The rural education component of pre-service training however, has been found to be very important. Exactly how much knowledge teachers have of rural areas is limited depending on the number of courses that are run in the tertiary institutions. I think under pre-service training Cohen's work is very important. Cohen looked at the teaching methodology of students working in groups. Under in-service training it is important that in-service is based on real needs, not just principal assumed needs or consultant assumed needs but the real needs of the teachers. The 'key teacher' concept is mentioned in the literature and that involves training a number of key people in the school and having them then train the other staff members. It was found in the literature on teacher attitudes, that many teachers come to an area with an anticipatory set of what the school and community are going to be like. Most often they anticipate that the school and the community will be negative. They anticipate that they are not going to like where they are going to be, particularly if they have had a forced transfer. The behaviour that teachers exhibit if they had that feeling, reinforces the concept in the students that rural areas by a variety of criteria are not as 'good' as urban areas.

THEME ONE : SCHOOLING

Teachers - recruitment/retention
- training - pre-service
- in-service
- attitudes - pre-transfer
- at school

Students - achievement
- retention
- minority groups

School/Community - working together
- school closure
- school size
- rural lifestyle
- rural school activities

Accommodation - options/choices
- funding

Figure 3

Achievement was the first item listed in the student category. It was found that achievement is often looked at as the output of education. Many comparisons have been made between the abilities of rural students and urban students, and back in the sixties it was found that rural students had lower mean intelligence scores than urban students. More recent studies, however, have tended to negate those findings. In fact, because of the stimulation, the resources, and the teaching practices that have been involved in rural areas, there is no distinction now in intelligence quotients between rural and urban areas. It has also been said that students are more independent if they are educated in rural areas particularly if they are in small schools. They learn to accept responsibility for their own learning.

An analysis of student retention indicated that retention and completion rates have been increasing across all the States in Australia for some considerable time. Retention of students has particular implications for the courses offered to secondary students as there are more and more students staying back at school. We need to cater for a much greater diversity of students than we have had to in the past.

Relating to minority groups I would like to show you some role model books that were published in Mt. Isa. These are role model books of aboriginal people that were written by students in the schools. They served to show both aboriginal and European students, that people of various

cultures can aspire to a multitude of roles. There are certain roles that people can aspire to. It was found also under minority groups that rural schools are a natural integrated setting. If there are children with disabilities in rural areas, as there are, they are catered for at the local schools. They don't have the range of placement options that are available in urban areas so the rural school is a natural integrated setting. Educational services for minority groups are often teacher focused rather than student focused. It is known that if a consultant works with one child that one child benefits, however, if they tend to work with the teacher all the children in the class benefit; so the services tend to be teacher focussed rather than student focused.

School community relations have been emphasised throughout the literature. I am going to show you a video which I believe epitomises the relationship that schools can have with their communities. (National Film Australia video shown on School-Community participation). That video to me epitomises the way that schools and communities relate together. That is what can be done in schools in our rural areas.

School closure is a concern to policy makers and Community members. It was found that most schools close due to a rational technocratic argument. An argument based on dollars and student numbers. Community participation did not play a major role in the decisions to close the school and that has been a particularly negative aspect of the decision making process.

School size was discussed using the concept economies of scale and the fact that there are economies of scale that exist when schools are under the range of six hundred to a thousand students. It is cost effective in other words to have schools under approximately one thousand. When you get schools larger than one thousand students you begin to find dis-economies of scale.

Under rural life style it was mentioned that the literature very strongly supports rural areas as being heterogeneous. They are not all the same, they differ greatly. Most of the concerns that have been listed in the literature regarding a rural life style have always tended to include communication, education, health and roads. I don't believe that enough research has been done on the positive aspects associated with a rural life style. If you read the literature it is always negative, the rural life style is seen to disadvantage students or disadvantage parents. We haven't looked or tended to look enough at the positive aspects.

Literature on the characteristics of rural school suggested the following questions - do rural schools disadvantage their students and their communities, are rural schools simply different, that is not better or not worse than urban, or are they discriminated against as Sher says? Do governments and policy makers actively discriminate against people in rural areas?

Under the heading of accommodation, it was mentioned that parents are required to make a number of decisions based on options that are available to them. The first choice relates to whether or not their child lives away from home. If they do make that decision, the next choice is what facility best caters for their students' needs. Funding of boarding schools for example, was found to be a major issue. Parents with restricted access to secondary schools face the daunting prospect of providing an education for their children away from home. Boarding school costs are rising in line with economic conditions, and there appears to be a need for accurate data to be supplied to policy makers, in order to produce some equity into the system.

The next theme looks at technology - Fig. 4. There are a number of myths regarding technology. The first one is communication. It is not the case, that everybody in rural areas has a telephone, or at least a telephone attached to an automatic exchange. They also don't receive mail everyday. Some places receive mail every ten days and often every month in the wet season. There's also a myth, I believe, that technology will be developed and taken up in schools. It's a common adage in various circles at the moment, that technology is going to save the world, as we

run out of natural resources, technological innovation will come and save the day. That sort of argument can be applied to schools and I wonder whether it's effective, whether in fact just because technology is developed that it will be taken up within our educational systems.

THEME TWO : TECHNOLOGY

Technology - myths
- transfer
- equipment
- training
- directions

Figure 4

The transfer of technology is a major problem. Technological innovation occurs in areas along a continuum. Some areas are well developed, others poorly represented technologically. We need to research how to minimise the technophobic attitude found among administrators, teachers, and to a lesser extent the students, and how to transfer the innovation that is occurring in some areas across to those areas where it's not occurring.

I think there are major problems with equipment. Some teacher reluctance to be involved in technological innovation, for example computer technology, may be due to hardware diversity. Teachers get used to a particular system and a particular program and then transfer to another school where the system and the program are entirely different. It is no wonder the teachers are frustrated with this. I believe very soon we're going to be looking at maintenance problems as far as equipment is concerned due to the on-costs involved with maintenance.

What is the most efficient way to train personnel in technology? That's an area requiring more study.

What are the technological directions for the future? I believe there are a number of these, the first is distance education. Remote electronic classrooms are going to change the way we presently think about distance education. Satellite technology, no doubt, has been under-utilised. The CD ROM has changed the way we think about data storage and data access and optic fibre cables will have a timely impact on data transmission.

Research is required to produce a national map on what is happening technologically state to state around the country. We simply don't know what is happening in other states, and I think continually we reinvent the wheel.

The next theme we looked at was educational delivery and the first heading was equal educational opportunity, which was found to be a misnomer. Darnell defined equal educational opportunity when he said, "schools should provide the opportunity for every student to develop personal abilities to the fullest, regardless of the ability to learn, regardless of where the student lives and regardless of a person's parental circumstances". Equal educational opportunity assumes a sameness between rural and urban areas, so rather than saying "equal" we ought to be talking about "equity". Equity assumes social justice.

THEME THREE : EDUCATIONAL DELIVERY

Equal Educational Opportunity
- a definition
- sameness/equity
- gender equity
- system produced change

Curriculum - Radford (1939)
- design
- local relevance
- challenge

Decentralisation - consolidated schools
- present trends

Service Delivery - structure
- training
- programs

Models - considerations

Figure 5

It is fortunate that such a pervasive and important area as gender equity is under-presented in the literature. I believe we are very lucky to have a speaker this morning who is going to talk exactly on that topic. It is important to look at system produced change if you are talking about opportunities. That means that rural areas should perhaps be represented on various task forces held by government and non-government agencies.

Under the heading of curriculum, I would like to read what Radford said back in 1939. Although written more than fifty years ago, I do not think we have heeded exactly what Radford said, and I quote: "It is impossible any longer to regard the curriculum as a fixed body of information passed on by tradition and uniformly imposed on all children, irrespective of geographical location and other circumstances. Many students of education have been impressed by the apparent need for constant rediscovery and restatement of this aim in some new form. In its laudable desire to conserve what is of permanent value in our human tradition education has a fatal capacity for adopting fixed ideas and routine methods, and thereby contact with a pulsating and developing reality of life itself."

The next heading of curriculum design looked at the balance between school-based decisions regarding curriculum and central authority decisions regarding curriculum.

A number of issues were related to local relevance. The first was that local relevance in curriculum can extenuate rural insularity. On the other hand, some researchers argue if you have an experienced based curriculum, and you start students from what they know, and then move onto what they don't know, it does not matter if the curriculum is not locally relevant. Both these points depend on two things. First, that educational resources reflect local relevance, and secondly that subject offerings are diverse and offer sufficient choice. I do not think either of these are currently reflected in rural schools. What then, are the challenges for policy makers regarding curriculum? These are listed below:

First policy makers must,

- acknowledge there is a difference between rural and urban areas;
- support resources, both commercially and regionally produced, that reflect the culture and lifestyle of the area in which they will be used;
- extends the experiences of students beyond their local community;
- explore a similar basic content to equip students to successfully function and adapt in society;
- promote the individuality of students and professionalism of teachers and parents to address individual needs; and
- cater for the diverse range of student aspirations through an enhanced array of subject offerings utilizing community and technological innovations.

Returning to Fig. 5 the next heading was decentralisation. I am not going to talk very much about consolidated schools. You will find that mentioned in the paper. What I think is important under decentralisation are the present trends of decentralisation as a tendency and decentralisation as an event. As a tendency, decentralisation denotes indefinite guidelines to the devolution of authority. It is when a central office says to regions or districts or schools, "you can make decisions, but before you make the final decision you come back and check with us, or yes, it is appropriate that you develop a particular program, but if you need funding for that, you will have to check with us that you can have the funds." Decentralisation as an event, on the other hand, denotes a belief in regions and districts and schools to make their own decisions. It is as if central office is saying to these people, "we will expect that you will be able to make certain decisions and we will give you a time frame under which those decisions can be made. We would also expect that you would have organisational structures in place in order to make those decisions." Systems operate very differently, depending on decentralisation as a tendency or as an event.

From the point of view of "service delivery", the structure of support services within districts, it was argued, can result in uncoordinated problem solving. A number of consultants visiting schools it seems, solve similar problems at different times. They are not coordinated to solve and tackle a problem within a school as a team. The literature supports the training of these consultants be generalised rather than specialised. People need to maintain their specialist skills, but they need to train also outside their area, in things such as problem solving and communication. The programs involved in service delivery to schools were mentioned, and those included multi-schools and the foster schools support scheme. You can also read those in the paper.

If we are looking at models of education, there are a number of considerations that we need to consider before one model is put in place over another, and those factors I will list as:

- changes in education also go with concomitant changes in social, economic and political areas;
- locus of control for defining if a problem is a problem be returned to the community;
- community education has great potential to firmly establish school/community links;
- multigrade/multicourse learning centre approaches to education can free timetables; and
- finally we should consider the encouragement and promotion of school and business entrepreneurial endeavours.

The last theme, theme four, (Fig. 6) looked at the question of rural education or education in rural areas. Under the first heading of "rural education" is curriculum. A rural education curriculum is specific. It is specifically developed for those people in rural areas. It aims to provide students in rural areas with the skills and the knowledge that they need to work in those areas. It is really based on tradition. Change is generally fairly slow and most of the attitudes are fairly conservative. Rural education would involve a dual system of education, that is a system whereby students would have access to tertiary facilities and to a specific curriculum developed for rural areas.

THEME FOUR : RURAL EDUCATION OR EDUCATION IN RURAL AREAS

Rural Education - curriculum
- aims
- tradition
- dual system

Education in Rural Areas
- aims
- tradition
- dual system
- dual system

Figure 6

On the other hand, education in rural areas has a curriculum that is generalist. It generalises across all areas. It is the one-best system that Nachtigal talks about. It aims to give students social mobility so that they can choose whatever occupation they wish to choose. Education in rural areas also assumes that resources are fairly generic, that the central authorities or commercial producers allocate resources to schools and that teachers then adapt those resources to suit the local school. That is the argument. Education in rural areas also predominates a de facto dual system, that is, that

the academic course or the academic streams in schools are highly regarded and the other streams are not as highly regarded. In fact, we still have administrators in Australia who label non-academic courses as "Mickey Mouse". I do not know what that attitude does to students, but it is certainly divisive.

In conclusion, I would like to comment on the research that is found in the literature. First of all, there is no philosophic foundation to much of the research. It is ad hoc, based generally on research in interest areas. It is meagre. It has lacked academic appeal, probably due to the fact that there are relatively few researchers in Australia, actually working on rural education themes. There has been minimal networking in the past. There has been confusion generally concerning the domain of rural education and the foci of research. There has been no national agenda on research priorities related to the provision of education in rural areas. What are our research priorities? From the paper, I believe, there are seven. (Fig. 7). The first one is a rural definition. We must get over the fact that we do not presently have a nationally agreed definition of "rural" for research purposes. Following the other priorities are, teacher preparation, curriculum design, community participation, access to services, secondary education to isolated students, and educational provision to facilitate gender and cultural equity.

- **rural definition**
- **teacher preparation**
- **curriculum design**
- **community participation**
- **access to services**
- **secondary education to isolated students**
- **educational provision to facilitate gender and cultural equity**

Figure 7

I believe in this conference, we have two choices. The first is that we can continue to reinvent wheels. We can continue to rehash old dialogue, or we can re-examine the wheels we have at the moment, choose the most appropriate ones and begin to build the carriage. It is time to move off the wheels and start to move upward and start to build this carriage. We certainly have the horses to pull this rural educational carriage into the twenty-first century. We have young, enthusiastic teachers, flexible administrators, committed multi-disciplinary researchers, caring, intelligent parents, and a supportive rural business industry. Ladies and gentlemen, for the purposes of this conference, it is time we got together.

ABORIGINAL AND TORRES STRAIT ISLANDERS: RURAL CONCERNS

Jeannie Herbert

I am an Aboriginal woman from the Kimberley district of Western Australia. I am the Co-ordinator of the Queensland Department of Education's Aboriginal and Islander Education Centre based in Townsville. My role is a varied one - encompassing tasks such as managing the Centre which houses an Aboriginal and Islander resource collection and improving community (including teachers) awareness of that collection, the provision of a consultancy service for teachers and schools, maintaining a support and training program for Aboriginal and Islander counsellors and aides working in government schools, encouraging schools and teachers to become involved in cultural activities, undertake curriculum development tasks which are relevant to the needs of Aboriginal and Islander education, liaise with the local Aboriginal and Islander community and so on. I service the entire Northern Region - from Ingham in the North to Pentland in the West and south to Sarina, including Palm Island. I assume that it is, as a direct result of my role at this Centre that I have been asked to speak to you today. To the best of my knowledge there has been no specific research in this field and the information I will present, therefore, has been gathered through consultation with Aboriginal and Islander Counsellors and Aides and local communities in the towns and communities I visit. I should also point out that, whilst my topic indicates, Aboriginals and Torres Strait Islanders, I have been unable to restrict my discussions to those two groups. As most of you will be aware, the populations of many of the towns in the Northern Region, include relatively high percentages of people of South Sea Islander origin.

Let me first define my perception of "rural". If we refer to Page 9 of the "Rural Education Research State of the Art Review", 'a rural student is defined as a person who, a) lives in the area defined by the Schools Commission (1987) as remote. OR b) lives in an area defined by the Schools Commission (1987) as provincial but where...such a student would not have daily access to a University or CAE.'

I have, therefore, excluded Townsville and Mackay from my considerations, based on the availability of Higher Education facilities in those two centres.

I would also like to comment on the section on Page 9, which is entitled Isolation and Remoteness. I would suggest that the "isolation" factor is an important element in Aboriginal and Islander education and one which is often overlooked. If we take the Macquarie Dictionary (1987) definition of isolation as 'to place or set apart; so as to be alone' then it is my experience that Aboriginal and Islander students are often "isolated" within the school situation merely by the colour of their skin. In addition, many are further "isolated" by the poverty of their life situation - with limited access to affordable transport, lack of appropriate and sufficient clothing and suffering ill health due to poor nutrition. "Rural" Aborigines and Islanders may suffer further as a result of their geographical isolation, in that, in smaller towns, it is often impossible to seek refuge in anonymity.

I will endeavour to outline Aboriginal and Islander concerns, under the headings teachers, students and community and I would point out that many of the concerns I raise do not require research they are stated needs of Aboriginal and Islander groups - they have been expressed over and over again. We hope that some of these concerns may be addressed <u>one</u> day! I would also add that I am not dealing with the issue of material resources in this forum. I believe "people" are are central to achieving goals in Aboriginal and Islander education. I am, therefore, restricting myself to concerns which deal with people. In my own opinion, it is more important to have teachers who

"care" instead of computers.

Teachers

On Page 12 of the Review, it is stated that, "The single most important reason given for prospective teachers' reluctance to accept country appointments however, is the fear of isolation from family and friends in an unknown place..." Fear of the unknown... of "isolation"! You can all sympathise with teachers in this predicament. How do young teachers adjust to country life, especially where they are reluctant appointees. How do they suddenly become "resourceful" people, able to make do with whatever is available or design and make whatever they need. I would suggest, that for some, the adjustment is made with great difficulty and I would also suggest that there are a few who are never able to make that adjustment.

What is of even greater concern to Aboriginal and Islander people in rural areas is the number of teachers appointed to rural schools who have no previous contact, or understanding of, Aboriginal and Islander people. I work with teachers and let me assure you there are many young teachers who arrive in our schools at the beginning of a school year never having met an Aboriginal or Islander person. They tell me they have seen black people around Brisbane and they had supposed they were Aboriginals. They hadn't really thought much about it - they had never spoken to 'one'. They have rarely given any thought to Aboriginal or Islander cultures or to the fact that there may exist cultural differences which could impact on their effectiveness in teaching these students.

We have to recognise that whilst many of our rural schools can only be staffed through the appointment of graduates who, however reluctantly, are prepared to get the obligatory stint of country service over and done with early in their teaching career. Ask yourself this question though..."How 'fair' is this system? Is it fair to the teachers concerned? Is it fair to the rural communities to which these teachers are sent? But most importantly of all...is it fair to the students - both black and white?

So what can we do about it? We can demand that future Teacher Training Programs ensure that teachers are adequately and realistically prepared for the situations they will face upon appointment. Aboriginal and Islander communities would like to see Aboriginal and Islander Studies become a compulsory unit in every pre-service Teacher Training Program. We believe that this is essential if future teachers are to have some understanding of Aboriginal and Islander cultures and knowledge of the teaching strategies which will enable them to become more effective teachers of the Aboriginal and Islander students in their classes. This would increase equity in educational outcomes for rural Aboriginal and Islander students and enable teachers to derive increased levels of job satisfaction from their work in rural schools.

Another issue which has been discussed is that of ensuring that teachers who are sent to communities such as Palm Island, are carefully selected, both for their ability to teach Aboriginal and Islander students and for their capacity to cope with living in an isolated Aboriginal community where the way of life may be totally different to anything they have ever experienced. In general, people seeking employment in Aboriginal and Islander organisations or in government departments dealing with a predominantly Aboriginal and Islander clientele, have to go through a selection process. A part of that "process" is an interview to determine their suitability. There is always a representative of the local Aboriginal or Islander community on those interview panels. Does the Department of Education follow such a process in selecting teachers for appointment to Aboriginal Communities? No.

We also believe there is an on-going need to provide in-service programs in Aboriginal and Islander Education for teachers in rural areas, due to the low retention rates for staff. We are, in fact,

currently working on developing an In-Service Workshop Program for teachers in this Region. This program is being developed in consultation with teachers and the local Aboriginal and Islander communities. By consulting with various groups we will end up with a program which has a common base but, due to the wide ranging consultation process, will cater for the specific needs of people in the various towns throughout the Region. Such a program will meet the 'real' needs of teachers in our schools. It is extremely difficult, however, for us to meet this need with only two people based at the Centre to provide a consultancy service throughout the entire Northern Region - we simply have too many demands on our time. There is one way in which we could see some improvement in this situation in the meantime. If we were to appoint Aboriginal and Islander Counsellors to all Pre, Primary and High Schools with high Aboriginal and Islander enrolments, we would be providing a very valuable support system to both teachers and students. In those schools where Aboriginal and Islander Counsellors, are currently employed, we find there has been a very positive response from teachers and a growing sensitivity to the needs of their Aboriginal and Islander students.

Teachers also need to accept a role as "learners". we are all guilty of not really "listening" to what our students are saying. As teachers we tend to be caught up in the "telling" process. It is vital that teachers stop teaching and start listening! Aboriginal and Islander people do have many things they would like to talk to teachers about - they don't bother because there's nobody listening...yet!

The lack of Aboriginal and Islander staff in rural schools causes concern. We know that a number of black teachers have been trained through the AITEP Program at James Cook University but where are they? We can appreciate that many of them may have gone on to further study or to more highly paid positions in government, but we believe there should be a concerted effort to encourage Aboriginal and Islander graduates to undertake some teaching service in rural schools. In this way, they would provide positive role models for Aboriginal and Islander students in isolated situations and, hopefully, encourage students to pursue higher education as a means of obtaining future employment in their rural communities.

Students

It needs to be understood that students consist of Aboriginal, Torres Strait Islander and South Sea Islander community groups and that whilst there is some degree of commonality of experience, all groups have a very separate and distinct history, culture and society. It is important that teachers and other school staff recognise this fact in their dealings with local community groups. It is also important that schools consider the needs of their Aboriginal and Islander students from an historical perspective. Many white Australians know little of what really happened to Aboriginal people as a result of the invasion and many claim, "all that is over and done with so should be forgotten." It must be understood, however, that what happened in the past is very much a part of the present for Aboriginal and Islander people. We are talking about people whose culture and history has been passed on, over the generations, by means of their oral tradition. For Aboriginal and Islander students in today's classrooms, that part of the past is still very much alive. It was their parents and grandparents who were taken away from their families, who were forced to live "under the Act", who had to struggle to merely survive. Every time there is a family get-together, the "old days" will be a topic of conversation.

Many Aboriginal and Islander parents and students today, see little relevance in what is going on in the school. Absenteeism is a chronic problem in many rural schools. Parents send their children off to school and the children drop out, somewhere along the way, to more interesting pursuits. In other situations, however, children find it fairly easy to talk their parents into letting them stay home. Ask the parents why the let their kids get away with this and they will tell you they don't see any real point in making the kids go to school when they obviously don't get much out of it - and what's the point anyway? The reality in many rural towns is simply this...there are few jobs

for black kids when they leave school. I am constantly being told that if a black person and a white person go for the same position - all things being equal, the white person will always get the job.

Poverty is another issue which causes concern in many rural communities. With high unemployment amongst Aboriginal and Islander groups, there is little available cash. Many of these families have a constant struggle to survive. In families, where alcohol and gambling are significant problems, children often suffer as a result of poor nutrition and/or lack of sleep which affects their capacity to cope with schoolwork, lack of clothing which results in inability to attend school during wet weather, and possibly physical or emotional violence.

The relevance of the school curriculum is also being questioned. For example, in some towns, Aboriginal and Islander people see little hope of obtaining employment, in their local area, when they leave school. Perhaps alternative curricula are valid considerations. Many Aboriginal and Islander communities are expressing the need for greater emphasis to be given to life skills - subjects such as nutrition, parenting, health, agriculture, marine studies, and so on. From this viewpoint, Aboriginal and Islander Studies could provide an effective means of assisting rural students develop a greater sense of self identity and self worth. The curriculum has to evolve out of student experiences . It has to provide content which meets the needs of all client groups. Therefore, if people wish to remain in the rural area then the curriculum used in that school should ensure that they achieve the skills they need to live in that area. If, on the other hand, Aboriginal and Islander students wish to pursue Higher Education goals, then they should be able to emerge from the secondary system with the skills and knowledge necessary to function effectively in mainstream programs.

In some rural areas, Aboriginal and Islander parents survive on seasonal work - vegetable picking, meatworkers, etc. While they maintain that this enables them to earn much needed money to boost the family income, it also means their children become transients in the education process. I am told that Aboriginal and Islander men in particular, have great difficulty remaining in Higher Education programs when they have to move away from their families and survive in "isolation", looking after themselves with little, or no, money. They tend to give up and go home where they look forward to a future in seasonal jobs or on the dole. We must address this issue in our schools and develop innovative programs which will improve the aspirations of Aboriginal and Islander boys.

Parents and Community.

The relationship between the school and the local Aboriginal and Islander community is a vital element in achieving greater equity for Aboriginal and Islander students in rural schools. Many Aboriginal and Islander parents would like to be more involved in their children's education but feel inadequate in view of their own previous poor education.

One of the most effective ways of achieving greater parent involvement in the education process is to have more Aboriginal and Islander people employed in rural schools. One of the most important aspects of the Aboriginal and Islander Counsellor's work is the home/school liaison role. This establishes a direct face-to-face communication link between home and school and, while it may take time to break down years of resistance and fear, it does work. A series of informal meetings with Principal and Parent groups allows people to get to know one another. The same process can then be followed with staff.

Once communication is established schools may like to set up Parent Skilling Programs which will enable Aboriginal and Islander parents to gain skills which can be helpful in assisting their children with homework, etc. Such programs also assist in building up their own self esteem so that, in time, they will gain sufficient confidence to participate in other school activities, such as the

Parents' and Friends' Association.

It is time local business people considered their actions. They need to view Aboriginal and Islander people as valued and worthwhile members of the community. They need to understand that there are cultural differences but they must develop and appreciation and acceptance of such differences. They must bring Aboriginal and Islander people into the work force and make them "equal" partners in the overall community.

I must stress the vital importance of consultation in relation to Aboriginal and Islander education. The only way we can make the present education process begin to work, for those Aboriginal and Islander people who want it, particularly in rural areas - where there are no other options - is to involve the local community in the school decision making process. The system has failed so far because Aboriginal interests and goals have never been sought in fact, it was never even contemplated that we might have interests and goals!

WOMEN AND GIRLS: RURAL CONCERNS

Lindsay Connors

Note: There has not been a great deal of research into the education and training needs of rural girls and women; this could be an issue for discussion at the conference.

Women and work in rural Australia

Almost 2.5 million women in Australia live outside cities and towns of 100 000 or more people.

Over three quarters of rural females have no qualifications beyond their schooling. But as a result of the rural recession, many rural women have sought employment or replaced hired farm workers to help secure an adequate financial base for their farm businesses or their families.

Employment opportunities in the larger rural centres are growing faster than in the capital cities. The reason is that the regional centres have been diversifying their employment structure away from a concentration on agriculture. Development of the tourist industry is just one example of such diversification.

Women living on farms who have sought paid work have not had it so easy. Quite apart from the difficulties they may have had in finding a job - if their farm is in decline it is likely that town businesses are also finding it hard to manage let alone grow - their family, community and farm commitments are such that taking on yet another role has placed enormous pressure on them.

Occupational segregation of the Australian labour market on the basis of gender is just as apparent in rural areas as it is in cities. Upper and middle class girls tend to become nurses, teachers, social workers or secretaries whereas working class girls go into retailing, clerical work, food preparation or clothing manufacture.

Changes in job structure and training can adversely affect rural women who are unable to adapt. For example, nursing has long been regarded as a suitable career for country girls: they could train at the local hospital, keep in touch with family and friends and earn a small wage while gaining a useful qualification. But now, nursing education has been transferred to higher education institutions in the cities and student nurses are no longer paid but depend on their parents to supplement living allowances under Austudy. The changes in training and in the administrative structure of hospitals mean that nursing is seen increasingly as a suitable career for men.

The education of girls in rural Australia

Females, in all States and Territories, exhibit noticeably higher Year 12 completion rates than their male peers, with the difference between the male and female rates being greatest in country areas. Further, in all States except Tasmania the discrepancy between the completion rates for metropolitan males and non-metropolitan males is greater than that between the rates for metropolitan females and non-metropolitan females. In other words, female students from non-metropolitan regions generally are more likely to complete Year 12 at a rate comparable to their metropolitan counterparts than are males.

However, a 1988 report on post-secondary education (produced by the Commonwealth

Tertiary Education Commission) showed 27 per cent of male and female city children go on to higher education, while only 7 per cent of male and 10 per cent of female rural/remote area children undertake higher education.

In 1983, the Lismore Women in Education Group, NSW, produced a report entitled *What about me? The impact unemployment has on country girls.* Young women consulted in the conduct of this study recognised that education had an important impact on their lives and felt that many girls were not encouraged to pursue it seriously. The girls surveyed aspired to a wide range of traditional and non-traditional occupations, but in reality they often worked in a limited range of the more traditional jobs. For many, a period of unemployment preceded early marriage and motherhood.

The educational disadvantages faced by many groups of girls can be further compounded by geographic isolation. In areas where the range of work, associated opportunities, and options for girls are restricted, the education of girls can be limited by rigid social attitudes and practices. Isolation from the social changes broadening the lives of women and girls in more populous areas may lead to outright resistance to them. Girls who attempt to step outside social norms and narrow stereotypes in some isolated communities may face even greater difficulties than their urban counterparts. These difficulties include a range of economic penalties, including various forms of sexual harassment. In these kinds of circumstances, teachers may face difficulties in implementing equal opportunity policies, in encouraging broader expectations for girls and in dealing with discrimination. Few female principals are to be found in schools in sparsely populated areas and there may be few community resources to encourage girls in looking beyond traditional or stereotyped career choices.

In some isolated school communities there may be only one or two families from ethnic communities. Lacking extended family and social networks, parents in this situation may feel even more protective towards their children, and particularly their daughters, than most other parents, and this may not be easily understood by schools. In such families, the anxieties surrounding girls leaving home for larger centres to find employment or continue their education will be felt even more keenly.

Learning difficulties experienced by Aboriginal and Torres Strait Islander girls are frequently treated as stemming from intellectual deficits; whereas, particularly in rural and isolated areas, they may reflect complex language situations, where students' first language may be an Aboriginal language unfamiliar to the general school community. They may also suffer from an attitude prevalent in many rural areas that the special funding assistance provided to encourage Aboriginal students to attend schools is already discriminatory so far as the ethnic majority is concerned, and the accompanying views that no further special support or assistance should be provided.

In smaller communities, social distinctions may be more obvious than in larger centres. This can have the effect of further depressing educational expectations and aspirations for girls from poorer families. This experience may suggest that access to the broader educational and employment opportunities increasingly available to many women in Australian society is the preserve of wealthier families who can afford to send their daughters to larger centres to further their educational and employment opportunities.

Schoolgirls in rural Australia also face greater distances between their place of living and their school, a more limited school curriculum and a smaller range of extra-curricula activities.

The rural recession has made it hard for many families to meet the costs associated with having children at boarding schools or hostels. In 1971, the Isolated Children's Parents Association was formed to promote equality of opportunity for children who have no reasonable daily access to

an appropriate school. Even with allowances and assistance, education beyond that which is compulsory is often forfeited because parents simply cannot afford more advanced secondary and tertiary education.

Schools in rural Australia

Throughout rural Australia, primary schools have a greater presence than secondary schools. A primary school is almost always available within a reasonable distance of home.

Research findings from a number of sources show that country children have lower educational achievement levels than city children. In small primary schools, newly qualified young teachers are often charged with educating children in essential literacy and numeracy skills. Without the professional support and encouragement of experienced teachers, often lacking in very small schools, the inexperienced teacher faces an unenviable challenge.

Curricula developed in cities may not always be appropriate for rural children, who in their day-to-day lives have quite different experiences from city children.

The Country Areas Program has encouraged innovative and flexible responses to the difficulties inherent in providing educational opportunities for rural children:

> Local people are involved in the education and community decision making, encouraging the sharing of resources between schools and communities. New ways of delivering education and other services building up rural skills are encouraged. The Country Areas Program has targeted particularly isolated areas, and grouped schools together in clusters to work together. Every school in the area is invited to participate. Each area has its own area committee, with a mix of teachers and community representatives. The area determines the needs and resources, develops policies and programs and is responsible for the allocation of funds to run the programs. Some of the major programs include music, computers and video, shared specialist teachers, mobile art and craft, transport and sport.

Further education, training and retraining

Rural women, perhaps more than other women, have been socialised to put their own needs last and tend not to be vocal in demanding their rights to education. They also suffer lack of confidence in their ability to undertake further education.

TAFE services are the most readily available further education services in rural areas, located in regional centres throughout the States.

But women's typical life patterns are often not catered for in educational establishments which have been developed primarily to fit urban men's needs and culture. Women may stereotype TAFE as a place where young men learn trades and so not consider it for themselves.

The needs of isolated rural women are:

- to move into non-traditional areas of agriculture as the nature of farming changes;
- to supplement farm earning by off-farm work or other entrepreneurial work;

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- for courses in both traditional and non-traditional areas;
- for courses which provide the option of formal assessment and where appropriate, articulation into, or credit towards more advanced courses; and
- for time to be allowed during the planning stages of programs to research potential employment areas, including entrepreneurial activities which students could undertake.

Community based education has been particularly successful in providing rural women with a pathway into education and a bridge to formal education.

One very successful initiative has been the Farm Gate Learning project in the Benalla district of north-east Victoria. Funded under the Commonwealth Government's Rural Women's Access Grants program, the project allowed women to travel to their local community hall on one morning a week for eight weeks to learn about topics which local women themselves had identified. Topics ranged from sheep husbandry techniques to computer to conversation skills. Child care and transport assistance was made available.

One of the strongest messages from rural women all over Australia is that they want community partidpation in decisions and processes at every relevant stage of the development of TAFE courses for which they are the target group. This will require a two-way exchange of information, based upon respect for the many different life styles and values of rural women.

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COMMUNICATIONS TECHNOLOGY

Roy Lundin

The aim of it all

There are those who believe that the microcomputer is the greatest technological revolution of our age, and that it is having the greatest impact on human behaviour since the development of 'The Pill'. It is my opinion, however, that the microcomputer is only the 'camira' - an aboriginal term for the gust of wind that precedes the storm. The real storm is just on the horizon and it is the whole realm of communication and the associated technology.

It is necessary, therefore, that educators take time to evaluate what is happening. We need to avoid burn out from trying to cope with future shock. There is a temptation for some people to increase their frenzied activity to keep up with the information explosion. Anxiety and stress, once mechanisms for survival, are now becoming killers. Survival now may well be dependent upon our conscious decision to stop and stare, to notice the flowers, to take in the sunset, to take time to visit and communicate and make and keep friends. There must remain a place in the curriculum for music, poetry, literature, art and gardening as well as science and maths. We should pay attention to developing and preserving positive attitudes towards the adventure and enjoyment of the journey of discovery called life. Can we be effective in the development of human compassion for our fellow human beings - especially those who are physically and intellectually challenged.

Technology is the tool; the quality of education and life is the goal. 'We can now choose what we want from technology and not be dominated by it' (Prince Charles).

Communication and information technology in education

The technologies

The array of communication and information technologies is enormous and increasing. Trends indicate both diversity and convergence. Single-function units like printers or facsimiles are becoming smarter and multi-functional. On the other hand, many functions are converging through digital systems based mainly on the microcomputer.

It is not the intention here to give an exhaustive catalogue of these technologies, Rather, it may be useful to talk about types of functions and applications. There are four basic categories - at present - describing the types of interactive technologies that are very relevant to education and to the scope of this paper.

"Teleconferencing" is a generic term for interactive, electronic communications. As a management and training tool it has been around since the 1960s, with some examples overseas dating back to 1935. Large companies and organisations in particular, such as INCITEC, Lend Lease, IBM, Telecom, AAP Reuters, AMP and many others have realised that the efficiency of teleconferencing can increase productivity and profit which, in turn, give them a competitive edge. On the other hand, the main users of teleconferencing in Australia during the past 10 years have been educational institutions using it for distance learning programs.

A Variety of Systems

There are four main types of teleconferencing: audio, audiographic, video, and computer.

Although these differ in terms of the specific technologies employed, they share some common elements:

- They use terminal equipment and space/terrestial telecommunications channels;
- They link individuals and/or groups at multiple locations;
- They permit full interactive communications among all participants;
- They are immediate and dynamic, involving active participation of users.

Each of these types has particular strengths and limitations, and these need to be carefully considered when choices are made regarding the type which will meet particular needs.

Audio Teleconferencing Using the telephone service, this is the most accessible, flexible and economic form of teleconferencing. Individuals can use an ordinary handset, but where groups of people are involved there needs to be loudspeaking telephones or conference terminals.

Multi-point links are made possible by an electronic "bridge". Until 1989 the limit within Telecom's service had been 10 points linked simultaneously. This year Telecom has introduced its new Conferlink service comprising several 60-point bridges so that it is possible to link as many telephone points as are manageable. The new service has a number of special features including "meet-me". where participants simply all ring the same number to be connected, and "pass code" to ensure security when required.

Audio-graphic Teleconferencing. Again, using the telephone system it is possible to enhance audio teleconferencing by combining it with some form of graphics communication such as facsimile, digital scanner, telewriter slow scan (freeze frame) television, computer generated text and graphics, electronic blackboard, etc. Microcomputer-based systems such as Olivetti's Optel system and Apple's Macintosh-based system, for example, combine many of these functions into a communications or learning station.

Video Teleconferencing. The most common form of video conferencing is one-way video transmission with two-way audio (using telephones), like "talk-back television". This may use satellite or terrestial carriers or a combination of both.

Two-way and multi-point interactive video are also possible, but are relatively more expensive and complicated. requiring considerable pre-planning and specialised studio equipment.

New digital technology called "codecs" (coder-decoder) permit video signals to be compressed, thereby reducing the bandwidth needed for transmission - in some cases down to the equivalent of two telephone lines. Indeed there are codecs which now come in the form of boards for the micro-computer, thus enabling all forms of audio, audiographic and video teleconferencing to be conducted as "desk-top teleconferencing".

Major public providers of video conferencing include Telecom, OTC and AAP Reuters; Lend Lease has a private system.

Computer Conferencing. Specialised software can extend the notion of electronic mail and bulletin boards. as in Telecom's Keylink and OTC's Dialcom, to asynchronous text conferencing through a computer-based system. This type of service does not exist to any .extent in Australia but will be introduced in the near future. Overseas this has been a popular communication channel for academics, but business people have found it rather time-consuming.

Choices regarding the type of teleconferencing to use will depend on needs and objectives. Generally speaking, about 90 per cent of meetings and training programs can be conducted very adequately using audio and audiographic system.

Cost may be another factor in the decision. For example, recent publicity indicates that point-to-point video conferencing within Australia costs $250 or $700 per hour. Overseas links can run to $5000 or more per hour. Users are also limited in terms of numbers (about 6 to 10 people per site) and by the need to go to a specialised studio. Advanced booking of studios and transmission bearers is also required.

Audio and audiographic conferencing through Telecom's Conferlink, on the other hand, is readily available wherever a telephone point exists, and costs are much less. For example, one hour audio teleconference with two points in Australia would cost about $40, and for ten it would cost about $400. Overseas links can be included at operator-assisted rates. Furthermore, there may be a group of people at each site, increasing participation significantly.

Applications

There are five major areas to which teleconferencing can be applied:

- Education and training ("teletraining")
- Administration/organisation
- Services
- Research
- Social/entertainment activities

In North America. 80 per cent of the use of teleconferencing is for education/training, in business as well as in education itself. A major user in the USA, for example, is AT&T which has reported that during one year its total cost avoidance was $1.8 million for 3176 staff-students through using teletraining instead of face-to-face instruction.

Music, adult literacy, languages, sales techniques, management skills and literally all subject areas have been effectively taught using various forms of teleconferencing. Evaluations consistently confirm this effectiveness. efficiency, cost-effectiveness and positive student response to this form of training.

Administration/organisation applications including meetings, interviews, briefings, industrial negotiations, trouble-shooting, consultations, new product information, routine work. project planning and implementation, negotiating with suppliers, reporting, and so on. In many cases, companies have recouped the cost of their own in-house system within a year through cost substitution for travel and time/productivty loss. J.C. Penny, a $14 billion company in the USA, has installed its own video condensing network with 1500 sites. Meetings which used to cost $50,000 now cost $12,000.

There are a few occasions when face-to-face or live video interaction may be required, but most of the activities listed above can be very effectively carried out through audio teleconferencing. Users report that meetings.s are usually more to the point and productive. Furthermore, the audio

option permits key individuals or resource people to be brought in at short notice.

Services applications include health services ("telemedicine"), social services, emergency services and other forms of community welfare and support. One of Telecom's earliest demonstrations of audio teleconferencing, for example, was with home-bound people in the Melbourne area being linked regularly for "tele-visits" .

Research has also benefitted significantly from the use of teleconferencing. Scholars nationally and internationally now regularly use multi-point links to work on joint projects and publications.

Finally, there are many social applications. Families which are separated or scattered around the world are discovering the power of teleconferencing to share special occasions such as - Christmas, birthdays and weddings.. Various other common interest groups, including school children are involved with electronic pen pals and playing various simulation games. Sporting groups use teleconferencing to organise tournaments.

Teleconferencing Techniques. In many respects the skills and rules that apply to face-to-face learning activities and meetings also apply to teletraining and tele-meetings. There are, however, various techniques specific to teleconferencing which need to be employed to ensure success with teleconferencing.

Some of these techniques concern the operations of the technology, others involve ways to personalise and humanise the process. The single most important aspect of teleconferencing is for the instructor or chairperson to ensure there is participation and interaction. This is what gives teleconferencing its power compared to other forms of distance communication.

The problems experienced in teleconferencing relate directly to human problems rather than technical ones. There is the need for training in teleconferencing techniques and this has been provided through workshops from the Brisbane College of Advanced Education since 1983. The College has now joined with Telecom to provide training throughout Australia and overseas.

Some examples

There are literally hundreds of examples of how communications and information technologies are being applied to improve education. A few of these are summarised here:

Audio teleconferencing

South Australian schools are all equipped with loudspeaker telephones which are used for everything from teaching flute-making and flute-playing in primary schools to a school project by gifted and talented children to convert the school dam into a yabbie farm.

The Indonesian language project in North West Tasmania has used audio teleconferencing to teach Year 8 students in several high schools Indonesian by one teacher in a fixed place. One valuable outcome was that supervising teachers at the sites learned the language as well.

In a Queensland high school in North Mackay a teacher-librarian arranged an audio teleconference for students with the author Roald Dahl to discuss his books.

Audiographic Teleconferencing

The Teleclass Project in Hawaii has for the past three years been linking high school students between Japan and Hawaii - as well as other countries on occasion mainly for language studies

using a videotelephone.

The *'Telematics* project in Victoria has over 100 schools equipped with loudspeaker telephones, Macintosh microcomputers and facsimile machines so that students can be provided with a full range of subject options. A special device permits the teaching of music keyboard skills on the telephone line.

The Queensland *Telelearning* project links schools by loudspeaker telephones, Macintoshes and facsimiles for German and Japanese language teaching.

In New South Wales, nine *Technology High Schools* are linked by the Olivetti's Optel system for their 'Staying On' (to senior high school) project.

Video Teleconferencing

German by satellite is a project emanating from Oklahoma State University in Stillwater, Oklahoma Dr. Harry Wohlert teaches German to over 2000 high school students using two hours per week of live, talk-back television and three hours per week of computer-based work. He has one marker assisting him, His students are performing better on the average than those taking face-to-face classes.

ACCESS Alberta, A satellite educational television system in Canada. provides a two-hour. live, phone-in homework service for students in prime-time early evening. In collaboration with the teachers' union, 'master teachers' in the four core subjects were selected to provide this extremely popular service.

TI-IN is a Texas-based private company providing high school subjects and professional development programs for teachers to school districts in 23 states. This is a subscription-driven system which uses the best teaching talent that can be found to give live, talk-back television services.

Computer (text) Conferencing

Simon Fraser University in Vancouver, Canada, has supported school use of their electronic mail and computer conferencing system. Gifted and talented children have used it and audio teleconferencing to communicate with children in Israel. The project has grown to where the group from Vancouver will now travel to Israel in 1988 for a visit.

A group of reluctant learners have used the same system for electronic pen pals in other countries, including Australia. Their motivation and writing skills have developed enormously.

McGraw-Hill in Minneapolis, USA provides a computer-based McGraw-Hill Information Exchange (MIX) service within which there is a Students' Information Exchange (STIX) containing a wide range of computer conferences including one called 'Students vs the Flat Earth Society'.

In March 1988, a special conference involving students from about 10 countries, including a group from Brisbane, was held on 'social studies' topics as a demonstration for the Technology in Education conference in Edinburgh.

The *Classroom of the World* project involves the twinning of primary (elementary) school Hawaiian children in Hana on Maui, with Hopi Indian children on a reserve in Arizona using computer-text conferencing.

The Queensland Open Learning Project

Progress to date

The State Government's $4 million pilot project is aimed at increasing access to tertiary education (TAFE and University) through a cooperative, decentralised system of delivery using communication technologies. The major elements of the project, and progress to date, are as follows:

Open Learning Centre Network (Allocation: $1 million)

As of May 1990, 25 Open Learning Centres have been established and a total of 41 are expected to be set up by late 1990. Of these, 20 will be in rural. communities which had no previous tertiary,education 'presence'.

Each Centre will have a Coordinator and a range of communication equipment, including microcomputers for electronic mail, audio teleconference terminals and facsimiles.

A full time manager has been employed for the Network.

Community involvement is extensive, including a local committee in each case.

Tourism, Hospitality and Hotel Management Courseware (Allocation: $1 million)

Course teams across seven institutions (including TAFE) have begun production of about 20 semester units of study, including for example two units of Japanese language and one on Asian Culture. Cooperation from the hotel industry is very encouraging.

Remote Area Teacher Education Program (RATEP) (Allocation: $630,000)

This project will upgrade community teachers through the four Open Learning Centres being set up in the far north - Badu, Yorke, Aurukun, and Hopevale specifically for this project. Cooperation is particularly evident between James Cook University, Cairns TAFE College, Queensland University of Technology, Peninsula Regional Office of the Department of Education (contribution over $120.000 to date) and the Federal Department of Employment, Education and Training (contribution: $100,000 to date).

Innovative courseware is being developed on the Macintosh microcomputers using Authorware for multi-media interaction. Delivery will commence in July 1990.

Preparatory and Remedial Education Project (PREP) (Allocation: $500,000)

Course teams from across all universities and TAFE have begun production of bridging and preparatory units of study in maths, communication, biology, chemistry and physics. These courses will assist people who need a second or third chance to undertake further post secondary education. Special Macintosh-based Computer Assisted and Computer Managed Learning programs are being developed.

Course Information Project (Allocation: $150,000)

Consultants have been engaged to produce, by August, a plan for a comprehensive Queensland-based course information database. This is a cooperative project between DEVETIR, the Schools sector of the Department of Education and the Federal Department of Employment,

Education and Training. Indications are that this project will put Queensland on the forefront of the national moves to produce a comprehensive national data-base on all courses (award and non-award), workshops, conferences, private training programs, etc. as well as employment information.

Contact has also been made with the British Open University to ensure the Queensland/Australian System will be compatible with the one being set up for the International Commonwealth of Learning.

Efficient Use of Farm Equipment by Rural Operators (Allocation: $53,000) has collaboration with industry in the production of Courseware for supervisors of machinery used in agricultural enterprises.

Visual Arts Education (Allocation; $150,000) has produced through the Australian Flying Arts School a satellite video series of four programs on Ceramics – with eight more programs and videotapes to be produced.

Access to Post-Secondary Education for Students with Special needs in Queensland (Allocation: $95,000) is producing, in the first stage training packages for distance teaching staff to facilitate distance learning for those tertiary students with hearing impairment, visual impairment, physical disability and learning disabilities.

Prospects

Committee on Open Learning

It is envisaged that the Committee on Open Learning will be representative of all education and training in Queensland: the schools sector, TAFE, Universities, government departments and private industry training. The Committee will be expected to develop a detailed plan for implementation of the State-wide plan on a broader scale.

Funding of future developments will not be dependent solely on grants from the State Department of Education but rather come from a range of sources, including

- other State Government Departments;
- providers of education and training;
- industry investment; and
- Federal Government sources.

The committee will need to make the appropriate approaches by early 1991.

Queensland Open Learning Consortium

The formalisation of the present inter-institutional arrangement into a Consortium and limited company is expected within a year. Major providers of education and training will be the share-holders.

Through the marketing of services and products in Queensland, nationally and overseas, this enterprise will be expected to become largely self-funding by the end of the second phase (1994) when a substantial infrastructure is in place. Some on-going government support will, of course, still be needed.

This Consortium and the project generally, should be able to work closely with the Queensland Tertiary Education Foundation (QTEF).

Prospective Users of the OLCN

Although the three Distance Education Centres (UCCQ UCSQ and QDEC) and other tertiary institutions may be considered the major users of the Open Learning Centre Network, there is an increasing number of groups and government departments expressing interest even before any marketing has been undertaken. Consultation and some preliminary trials for meetings and training are being carried out at present with:

- Queensland Police Department (and the newly established Police Education Advisory Council);
- Queensland Corrective Services Commission;
- Institute of Chartered Accountants;
- Post-Graduate Medical Education Committee;
- Metal Traders Industry Association (MTIA); and
- National Resource Centre for Nurse Inservice.

This Queensland initiative has also been used to support the State's submission for the establishment of an Asian-Pacific Open Learning Agency as part of the Multi function polis.

Socio-economic issues

Remoteness

A key issue is the tension between need and economic viability. Following is a brief illustration for the Torres Strait Islands.

Telecottage

Abstract

The economic, technical, social and cultural development of sparsely populated areas is a long-standing concern of industrialised and developing countries alike. The telecottage approach to community development, based on information technology, began in Vemdalen, Sweden with the opening of Harjedalens Telestuga on 13 September 1985. It was developed through local initiative to train the public at large to operate and use information technology with no prerequisites as barriers to admission, to provide service and assistance to business, and to stimulate entrepreneurial activity in *that* sparsely populated, mountainous area. Telecottages represent a community-based, decentralized approach to development. They are pragmatic and empirical in origin but an analysis of their operating guidelines and procedures shows that they are grounded in tested precepts of education and community development. The core concepts of the telecottages will be discussed in the light of emerging principles of development in the information age.

Introduction

The telecottage approach to community development began as a pragmatic empirical attempt

to solve a practical problem. The first telecottage was Harjedalens Telestuga established in a mountainous *area in* the north of Sweden where the population density is less than one person per square kilometre. For many years the area lost population because young people were attracted by job opportunities in the large cities to the south Stockholm, Gothenburg, and Malmo. The government at all levels sought in vain to stem the flow by encouraging local development. In April 1985 the University College of Ostersund, the county government and the Nordic Council of ministers held a seminar to examine the problem and seek solutions. One proposal resulting from the seminar called for the development of a telecottage with the following aims:

To provide opportunities for people in the area to use modern technical equipment, thus reducing their fear of the computer and their resistance to it

- To educate and train the public at large in the use of computers, thus making them independent of distance to cultural centres and facilitating their access to the benefits of the information age;
- To foster local participatory democracy; and
- To foster international cooperation.

From its inception the project required cooperation of many individuals and groups - state and local government, Swedish telecommunications industry, business large and small, the university, private citizens from all walks of life. And it attracted considerable attraction from other countries of Scandinavia and beyond.

The telecottage is an unqualified success. It has become what it was envisioned, an electronic town hall. It is open to the public and very much used fourteen hours a day - from eight o'clock in the morning until ten at night. Economically, it receives financial support to cover start-up costs and initial operations, but it quickly attracted sufficient contracts for services to become self-supporting. It is meeting its objectives of stimulating the use of computers in everyday life, supporting and encouraging small-scale businesses, demonstrating the uses of modern information technology, of enriching the cultural and social life of the community.

There have been many cooperative community projects in developing and industrialized countries, in urban, suburban and rural neighborhoods. They have met with varying degrees of success. What accounts for the success of the telecottage? One factor seems to be the timing of its introduction, another the widespread and deep involvement of the potential users and beneficiaries in all phases of its planning, establishment and management . Of paramount importance seems to be its conceptual base and related practices. A study of the first telecottage, Harjedalens Telestuga, its operating principles and practices, its conceptual framework shows that they are based on well-known principles of education and training and that they are in accord with the characteristics and requirements of the information age that thus far have been identified.

Source: *Conceptual Framework of the Telecottage Approach to Community Development*
Inez L. Sperr Brisfjord
Palmer School of Library and Information Science Long Island University Brookville,
NY 11548 USA

Six jobs created at the Vemdalen telecottage

In the premises located above one of the two shops in the village there are 19 computers, one telecopier and a telex machine. The director, Karin, takes care of the management and the drafting of information and publicity texts which will appear on the television screens of the subscribers.

Bjorn, Jane and Kristina, who are natives of the village, teach students of all ages how to use the sophisticated equipment, which is somewhat incongruous in this context: the windows look out on a small wooden church, the forest hugs the houses, and the traffic problem at the entrance to the village is due not to cars but to troops of reindeer.

The first training course for unemployed people has just ended. Thirteen people - including 11 women - sent by the district labour office have attended classes five days a week and eight hours a day for a month: how to use a word processor, a data bank; how to control stock, do book-keeping, organise a time study or prepare a programme. In an enormous room adjoining the computer hall meals are heated, coffee is made and there is chatter and relaxation. In the next few days there will be visits to local firms to assess in what areas the rudiments acquired should he studied in greater depth. One trainee decided to write to industries on the northern coast of Sweden suggesting that they create remote control "telejobs". The idea, which was perhaps too novel, did not initially catch on in the private sector. In contrast, a large administration has decided to give the telecottage text transcription work.

One of the trainees who faced with the closure of the family business, took a part-time job on a local paper, will be able to improve his prospects thanks to the computer training at the telecottage. And the others? What did this course do for them? No doubt a thorough debunking of the computer as a magic box. And then? Two trainees from the next village, aged 20 and 53, dressed alike in jackets and jeans, both attended the classes with interest. The younger did odd jobs, but even these are difficult to find. She said she definitely did not want to leave "her" valley. The other sold her business and has to face a difficult,financial situation; the idea of going to work in the town frightens her. The telecottage gave them back a taste for.study and success. They know now that they can learn, that there are courses in the university 60km away" they must get together to .share a car ... but Karin has suggested that the courses should be transmitted.to the telecottage on video, so perhaps they can follow them at Vemdalen?
Esther Peter-Davis

Summary

Technology can:

- engage learners with people with powerful ideas;
- develop in learners an awareness and appreciation of the whole world through global literacy;
- engage learners with rich arts and cultures - and thereby inspire people to create and share;
- engage learners in cooperative activities with each other, leading to understanding, bonding, multiculturalism, new language/communication skills. and so on:
- give learners access to the best information available for decision-making;
- increase participation and interaction in the process of education to help learners develop ideas and test them against ideas of others;
- encourage learners to formulate personal and group commitments to the future; and
- inspire the leadership and self-reliance so that learners will take the necessary initiatives for on-going education.

RURAL SCHOOLS AND THEIR COMMUNITIES: TOWARDS A MORE SYMBIOTIC RELATIONSHIP

Don Squires and Ron Sinclair

Introduction

It is particularly appropriate that any forum concerned with rural education should devote a portion of its time to a discussion of issues to do with the relationship between rural schools and their communities. Such relationship lie at the very core of the set of factors that explain the success of rural education, providing rural schools with their greatest source of competitive advantage *vis-a-vis* schools in urban Australia.

There can be no doubt that any attempt to capture what constitutes 'quality' in education must acknowledge the quintessential contribution of interpersonal relationships to the total educational process. Rural schools, in general, are in an ideal position to maximise that contribution. This is because of two very important characteristics that rural schools typically share. Firstly, the various communities to which they relate are known to have a peculiar and distinctive nature that can be turned to the school's advantage and secondly, they are generally small enough to allow this to happen.

Much has been said and written about the quality of relationships in rural communities. A frequent practice has been to invoke the concepts of *Gemeinschaft* and *Gesselischaft*, developed by Tonnies over 100 years ago. *Gemeinschaft* implies primary relationships, that is, relationships based on kinship, neighbourhood, friendship, common beliefs and common interests, arising out of a complex of affective states, habits and traditions.

By contrast, *Gesselischaft* implies secondary relationships - a network of legal and moral relations, essentially governed by one's position within the network and characterised by individualism, impersonality and contractualism. Given the range of communities to which a school typically relates - communities of scholars, of professional colleagues, of parents, of local residents, of business, social, sporting and cultural groups, together with the relatively restricted population in areas served by rural schools, it is virtually inevitable that the network of relationships will overlap. A variety of groups and activities can only be sustained if community members fill more than one role. This network of face-to-face relationships is much more likely to reflect *Gemeinschaft*, in contrast to the anonymous, anomic *Gesselischaft* that coincides with a decline of community in urban areas.

Adrian Bell and Alan Sigsworth go straight to the heart of these issues, when they question the appropriateness of what they call the 'contractual relationship' between school systems and their clients. In their view such a relationship, bounded by a statement of formal responsibilities to parents and taxpayers, can, in circumstances where people know and have confidence in each other, be a severe restraint on appropriate educative relationships between the school and the communities it serves. (Bell & Sigsworth, 1987, p252)

> Within a contractual relationship : the responsibility of the local education authority is limited to ensuring that all children receive their educational entitlement, a curriculum which is broad, balanced, differentiated in line with their individual abilities, but relevant to their needs and to national priorities. To this end, it is considered essential to harness the cooperation of parents in support of the school's enterprise, but any more extensive concern, say for example, with the

> social development of the wider community, is beyond the scope of that contractual obligation. The school is not a resource for the local neighbourhood, except in so far as it provides its children with their primary education; similarly, the local environment cannot be called upon as a resource for the school except in so far as certain elements of it (the parents) can be enlisted to lend their encouragement to the work of the professional teachers. It may be that the presence of a school does contribute to the formation of a sense of local identity, just as it is possible that other adults may contribute to the school, for instance through fund-raising, but they are incidental bonuses (pp253,254).

This paper will explore ways in which a better, richer relationship might be developed between rural schools and their communities. Because we believe that the *Gemeinschaft* which exists in rural areas provides a valuable reservoir of goodwill and inspiration that can be applied to the benefit of both the school and its communities we intend to propose some ideas that might guide the development of school/ community relationships. These ideas are not intended to underpin some colonizing strategy - a way of extending the influence of the school into the community beyond its normal boundaries and outside its normal hours, merely to buttress its educational program. Rather, we support a genuinely symbiotic relationship, allowing schools and communities to give each other the mutual support from which all can grow.

Specifically, the paper will explore three major areas; viz, a role for communities in school curriculum, a role for schools in community development, and the role of the school principal.

The Curriculum

Often when a school's curriculum is mentioned what is first thought of is the set of subjects available to students. This crude and limited view of curriculum underpins many assertions about alleged deficiencies in curriculum provision in some smaller rural secondary schools. The argument often advanced is that since a small school has fewer teachers than a large school it can therefore offer fewer subjects and has less expertise in teaching to offer its students. These students are therefore said to be 'disadvantaged'.

Adoption of a broader and more realistic view of curriculum enables a much richer appreciation of the reality and the potential of the rural school curriculum. What finally matters most when one considers the notion of 'curriculum' is each individual child's learning. This is not merely a matter of what a pupil learns but also of how it is learnt. One approach to the teaching/learning process might result in a child memorising material in rote fashion to be regurgitated in tests that emphasise recall rather than understanding and application. Another approach, using the same fact base, might encourage pupils to apply those facts to solve problems, and so on. In his seminal contribution to curriculum theory Barnes (1976: 15) makes clear that, in a setting for learning such as a school or classroom the form of communication determines the form of what is learnt:

> One kind of communication will encourage the memorizing of details, another will encourage pupils to reason about the evidence and a third will head them towards the imaginative reconstruction of a way of life. From the communication they will also learn what is expected of them as pupils, how sharply (the teacher) will apply her own criteria of relevance, whether they are expected to have ideas of their own or only to remember what they have been told. That is, they will find out how far they are expected to take part in the formulating of knowledge, or whether they are to act mainly as receivers.

The images of learners implicit in various pedagogical approaches are therefore of prime importance. As Barnes goes on to argue, the learner's understanding are the crucial element:

> What I mean by 'Curriculum' is the shaping of understanding, beliefs and values which goes on under the aegis of a school. Undoubtedly teachers' objectives, and their choices of content and method, are important, but they do not by any means constitute the whole. The pupils too have 'objectives', beliefs and values which must influence the effective curriculum just as much as do the teacher's planned objectives, since the 'shaping of understanding' which I mentioned above is largely their reshaping of existing knowledge. Moreover, every school has organizational and cultural characteristics, so that every teacher brings to the classroom both his version of the school's implicit values, and covert beliefs and assumptions of his own. These implicit goals and beliefs go as far to shape the effective curriculum as do the objectives to which the teacher would give deliberate assent. To understand how these unite to shape the social order of a classroom and thence what children learn, we need the intermediate concept 'communication', which is common both to the public, shared ordering of belief and to the private ordering of belief by individuals. Here a 'psychological' model of learning is not enough: for curriculum theory a social model is needed, for it must acknowledge both learner and social milieu, and include communication from pupil to teacher as well as vice versa. (Barnes, 1976: 187-8)

Clearly then, the set of relationships that together constitute the communication system of a classroom - a system in which learning is, in essence, being negotiated continuously - is one crucial variable in any proper consideration of the notion 'curriculum'.

Often the most important of these relationships will be that between teacher and student. The other relationships that make up the social system of the school or impinge significantly upon it are also important though: student/student, teacher/teacher, teacher/parent, parent/student, teacher/local resident or business person, student/local resident or business person etc.

The important thing is what ultimately happens inside each child's head. This, in turn, will depend considerably, we feel, on the nature of those interactions which, in the context of a school's 'curriculum' characterise each of the above relationships, (not omitting that in which the pupil, finally, talks to him/herself). Thus it is that in the learning, say, of a mathematical process there might be, *inter alia*:

- considerable interaction between teacher and pupils as the teacher attempts to explain or otherwise present the process
- interaction between teachers about how this aspect of mathematics might best be taught
- interaction between pupil and parent as the former attempts in a homework session to grapple with the process
- interaction between parents about the appropriateness of the school's maths program and the adequacy of its teaching
- interaction between teacher and parent during a parent interview session pinpointing, amongst other things, reasons for the difficulties the pupil is having in mathematics

- Interactions between students and community people about the value of mathematics in everyday life.

Innumerable such interactions characterise the endeavour of the school virtually continuously. There is an impressive consensus amongst educators that, for the most part, where relationships between role incumbents that directly relate to a pupil's learning are sound - that is, characterised by warmth, mutual respect, a willingness to listen, an openness to ideas, and so on - then learning is likely to be enhanced. A view of curriculum that attempts to elucidate something of its quality might therefore encompass the quality of relationships in a school.

That the significance of these concepts is understood by members of school communities can be established by a few minutes conversation in any rural town. Residents will quickly provide an evaluation of their school in terms of their perceptions of the principal's public image, whether their own children are 'happy' to attend the school, their relationships with students and staff within and outside the school and the way the school relates to the 'life' of its communities. (For direct research evidence to support this point, see the work done on Central Schools in NSW by Sinclair, et al., 1988).

Clearly then, these broad curriculum goals can be pursued most effectively when schools are aware of, reflect and act upon the community's own definition of its needs, strengths, resources and goals. Freeman Butts (1955) has said that education is more vital and healthy when it is kept close to the needs of the people and when they feel they have a genuine stake in it, as well as a measure of responsibility for it. Close relationships between schools and their communities, if properly nurtured and utilised, provide the means by which the worlds of formal scholarship and creativity are brought into relationship with family and the neighbourhood from which the child comes. Such relationships can help fit the schooling to the child, ensuring that the school's curriculum, style and management practices adequately reflect the background and reality of the children and the skills, resources and values embedded in local lifestyles.

The challenge for rural schools and their communities is to ensure that appropriate structures and processes are in place so that the school executive and teaching staff are fully aware of the communities' values, traditions, patterns of living, aspirations and apprehensions and are given every assistance in the task of incorporating these into the school's curriculum.

The generally large and centralized schooling systems that are our historical legacy have tended, in the interests of equity, to pursue a very much generic educational program. It was argued that in order to ensure that every child received as near as possible the same quality of education it was necessary to ensure that the curriculum was the same for all children, that teachers were given equivalent education and training, that resources were allocated on a strictly per capita basis and the like. In more recent times these arguments have been largely discredited amidst a growing realization that provision of schooling in rural and remote areas involves not only greater costs but qualitatively different sorts of responses from school systems. (Sher, 1981, Darnell & Higgins, 1983). Attempts by all Australian states to decentralize their public school systems and to shift decision-making into regional and local areas provide the necessary structural context for the sort of program this paper advocates. Nor should schools feel that in committing themselves to a locally relevant curriculum that they are in some way abandoning the national perspective, for as Bell and Sigsworth point out (1987:256):

> The world in which children are growing up is not only the cosmopolitan world of national priorities, but the more immediate community of local needs. For primary age children especially, it is in the <u>local</u> context that they can have the opportunities to develop the competence to shape their lives and to respond to the demands and expectations that are placed upon them. But that is not an

> individualistic enterprise, for we are all of us social beings - the unique product of the interplay between our individual personality and a particular set of cultural circumstances which have influenced us and which we, in turn, can influence. At the earliest age, a child brings to school the stamp of the community upon his or her upbringing, in thoughts, feelings and attitudes, and is also, in however small a way, capable of contributing to the development of that community. In fact, we would argue, being able to contribute to the social development of the community from which children substantially draw their identity is as fine a way as any of encouraging their individual development.

Similarly, rural schools in their endeavours to involve their communities in school activities, need not feel constrained by formalized prescriptive mechanisms such as parent-teacher association meetings and written communication. The web of interpersonal relationships in which rural schools are inevitably caught ensures that participants will always know a great deal about each other. The organic nature of the school's connections to its communities, through its students, its teaching and ancillary staff (many of whom will be long-term local residents) and its dealings with local social, sporting, cultural and business organizations will ensure that the kind of knowledge that each has of the other is of that special deep and intimate form that is characteristic of primary relationships. What is required is only a commitment to the notion that these relationships are properly within the domain of educational decision-making that the school shares with those around it a sense that they jointly comprise an educative community.

Schools and Community Development

Schools which encourage members of their communities to actively participate in the process of curriculum development and delivery are already doing much that contributes to community development. As teachers, students and community members co-operate in curriculum endeavours they are inevitably furthering their personal development. Students and community members can re-affirm their identity and the validity of local ways of life, traditions and patterns of thinking, boosting their self-esteem and confidence. Teachers can broaden their understanding of cultural patterns and ways of life that may not entirely match their previous experience and can gain a deeper understanding of the role of curriculum in connecting with the lives and experiences of learners.

By themselves, these achievements would be eminently worthwhile but it is our belief that there are many other ways in which schools can and do make a contribution to the communities they serve.

Perhaps the most basic is the contribution that schools make to local and regional economies. A school is a significant business enterprise in many communities. It generates demand for labour (eg ancillary staff), goods (eg resources, consumables) and services (eg transport, catering). School personnel are a salaried labour force with regular cash income in communities where this may not be common, and moreover, teachers and school executive staff, all tertiary educated, represent a pool of skills, competencies and talents that might not otherwise be available in the local area. Schools as part of their charter, develop in their students levels of education and skills that are required by an increasingly sophisticated rural economy. Where schools are situated close to the families they serve the availability of those services represent important cost-savings to rural families and are an important contributor to the viability of many local enterprises.

An extension of these benefits can occur when schools make a deliberate commitment to their role as a community centre. The physical facilities of the school are a major community asset and many notable examples now exist of co-operative arrangements whereby schools share their facilities, and perhaps their educational resources, with other community groups. Particularly in-

smaller communities, schools can provide a central meeting place and a standard of physical provision that would otherwise be beyond the resources of the local population.

The school has other resources, too, which can be applied to the task of maintaining and strengthening local communities. Most obviously the children contribute a great deal to the life of their community through the social, sporting and cultural opportunities they provide - events which they organize and produce and which are valued by the older generation. As Bell and Sigsworth (1987: 273) point out, there is a different quality about these occasions in rural communities:

> It could be said that incidents such as we have briefly outlined could occur, and do occur in urban schools. That is quite true, but there is a difference. Where there is a close-knit network of relationships from the school out into the community, where, in other words, people know each other well, events sponsored by the school affirm a sense of community, not just a connection between parents and the school. Pupils can stage a play for their own parents as easily in an urban school as in a rural school, but staging it for the community is a more improbable undertaking.

Further, as rural communities face up to the increasing challenges of service provision in their districts, more are coming to realize the potential of the school's resources to meet some of these needs. Schools which provide a local 'newspaper' for their communities are an example of this kind of co-operative self-help approach. A more sophisticated example is the Victorian secondary school which provides a commercial printery service to its district (*Schooling in Rural Australia:* 94). The exercise whereby school personnel (including students) and community members jointly assess community needs, examine the resources of the school to determine whether it can help to meet any of those needs, then operationalize the plans that emerge must be tremendously valuable as an exercise in community development, apart from the direct benefits that flow from the success of the enterprise.

Often, the sorts of challenges that affect rural communities will require, for their solution or amelioration, the participation of a range of agencies, organizations and individuals. Schools which are 'in touch' with their communities will be in a good position to provide the necessary liaison and co-ordination. (Frequently, teachers and school executive staff members are, in their private capacities, active participants in a range of community organizations and activities). Here again, the characteristic *Gemeinschaft* of rural communities can simplify what might, on the surface, appear to be complex structural/organizational problems.

In adopting a community development role, the school is making an investment in the health of the communities that it serves. The dividend on that investment is not only in the existence of stronger, more viable local communities, but in the nature and quality of the support that such communities can give to each other, to the students in whom they share an interest and to the educational programs of the school.

The Role of the Principal

The sorts of proposals we have been advocating in this paper have clear implications for all of the key actors involved. In some parts of Australia corporate cultures, tradition and inertia have ossified the roles of those associated with schooling and education to an alarming extent, so that the task of shaking individuals free of those traditional role prescriptions is bound to be a difficult one. An active, symbiotic relationship between schools and their communities will require a re-definition of roles. Students, teachers and community members will all be affected, but perhaps the most dramatic change will be in the role of the school principal.

The principal carries the responsibility for ensuring that the most appropriate structures and processes operate within the school and its communities so that a fruitful partnership exists between them. This will include a responsibility for inducting younger teachers, or those new to the staff, into the realities of their rural school situation and what this means for their professional and personal pursuits. The principal is finally accountable for the adequacy of the school's educational program and has the task of accommodating and co-ordinating what may be sometimes conflicting demands from the various groups with whom the school interacts.

These tasks will be a little easier where principals have had an opportunity to acquire, through work or residence in rural communities an understanding of life in such communities and an appreciation of its dynamics. Experience in NSW suggests (see Boylan, et al., 1989) that for those schools located in the less remote and less climatically demanding regions this will not be a major problem since the incidence of teachers, executive staff and principals with many years of rural school experience is quite high. For those schools where, for various reasons, attracting staff is more difficult, there may need to be considerable support given to principals in the early stages of their incumbency, since many will be recruited from urban areas and have little experience either of school management or of rural living.

The major and most challenging areas for change in the principal's role involve the central question of 'ownership' of the school. Traditionally, principals have thought of the school as 'theirs' and have not felt constrained in any plans they might have to shape and mould it to their own ideals and purposes. In those cases where this happened to coincide with the wishes and aspirations of school communities it was more serendipitous than deliberate. The principal's power to act in this way was justified in terms of his or her professional expertise, experience and competence which was self-evidently superior to that of anyone else involved with the school.

The extent to which this is still the picture in Australian schools varies from state to state and region to region. It remains pretty much true for NSW to this day, although the implementation of the recommendations of the Scott Committee of Review in that state has presented the opportunity for a major re-definition of all roles within the state education system and leaves the door open for fresh approaches to the special needs of rural schooling.

What this paper advocates is a role for principals which makes it clear that 'ownership' of schools is vested in their local communities. Within this arrangement the principal would be a respected and trusted professional whose expertise in the position would be highly esteemed, but who, nonetheless, would be charged with implementing practices and policies that had the support and reflected the interests of local communities.

Whilst this may seem a somewhat radical proposal to those steeped in the tradition of the virtually autonomous school principal, it would, in reality, place the principal in a position similar to that which is common in some other public institutions. For example, the Town or Shire Clerk, or the Chief Executive Officer of a public hospital are highly competent and respected professional officers, exercising a great deal of power and control, but within the constraints of their accountability to community representatives - the council, or board, or whatever.

In practice, we feel this proposal would probably lead to a minimal diminution of the principal's power and influence but the symbolic significance of shifting the locus of final authority to the communities would indeed be great, especially if accompanied by a right for communities to participate in the process of appointing or selecting principals for their schools. It is, after all, the communities who provide the essential continuity for Australian rural schools, especially for those in areas where it is difficult to attract and hold staff. Frustration and dissatisfaction with changes wrought by transitory principals to the school's style and direction are a commonplace in such schools and are a source of inefficiency that cannot be in the best interests of the children they serve.

Nor, we would argue, is the principal giving up all in return for nought. A moment's reflection would suggest that there are very real advantages accruing from the opportunity to step into an institution which has established procedures, practices and policies that enjoy the support of those whom they affect. It leaves the way clear for a competent principal to influence the operation of the school in ways he or she thinks are desirable, provided the community can be persuaded to accept them. More importantly, perhaps, it at least partially quarantines the school from the effects of an incompetent principal.

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EDUCATION IN RURAL AREAS OF SCOTLAND

Mary Urch

Introduction

It is important at the outset that I make it clear that this paper is not a report on a research project, nor is it an exhaustive account of Scottish education. It is no more than one person's attempt to provide a glimpse of the current picture of education in the rural areas of Scotland, based on a small selection of illustrations. I am very aware of what it doesn't cover and of the dangers inherent in such an exercise. I will do my best not to make too many sweeping generalisations in the process.

In his report on the O.E.C.D. research project on education in sparsely populated areas, Jonathan Sher drew attention to the fact that, while there are vast differences in the various contexts in which education is provided across the globe, the issues which arise are the same. Since being here, I have been struck more by the similarities than the differences. It is this that makes the idea of a network of concerned individuals and organisations, countrywide and international, collaborating to share ideas and experiences, resources and research findings so relevant.

I intend, therefore, to take some issues with which this conference is concerned and look at them in the Scottish context - rurality, current policy towards education in rural areas, community participation, the curriculum, staff development and technology.

What is rurality in the Scottish context?

There are three points that need to be made here:

1. We do have remote areas in Scotland. Any definition of remoteness will depend as much on an understanding of what isolation means as on distance. One's perception of isolation is often more closely related to the accessibility than the location of services and large centres of population. Many people living on islands in Scotland felt threatened recently by the government's proposal to withdraw subsidies from the ferry services on which they depend so much.

   Remote areas are part of our geographical inheritance. As a result, we were never able to embrace the notion put forward in the Plowden Report (1967) in England that schools with less than one hundred on the roll were not viable as effective primary schools. Small schools, while not comparable to isolated education in the Australian context, are a fact of life in Scotland and will continue to be so.

2. It was the belief of the early reformers of the Scottish Church that the people were the church and that every individual was morally responsible for not only his own salvation, but also for the well-being of his neighbours. They believed in education as the means of achieving this aim and it was their intention to provide a minister, church and school for every parish. They were thwarted in the attempt because the wealth of the pre-reformation church found its way, not into their coffers, but into the pockets

of some wily prelates of the old regime. Nevertheless, this idea remained at the forefront of Scottish thinking and, by a variety of means which we don't have time to go into here, had more or less been achieved by the time the 20th century dawned. The result of this is that:-

a. the Scots have always placed a high value on education;

b. no distinction has ever been made about educational provision in different parts of the country; and

c. many of our small schools are in areas which are not at all remote.

3. Since the Education Act (Scotland) in 1871 made elementary education compulsory for all children, the state has accepted full responsibility for the provision of that education and has gradually extended its remit to include six years of secondary education. While some parents choose to, no parent needs to pay for a child's education other than through normal taxation.

British society has undergone a period of significant change during the last decade. Some of these changes are the direct result of the policies and legislation of the government. Others reflect not only the economic climate in the country, but also a change in attitudes towards the protection of the environment and the notion of what constitutes progress. Bigger is no longer necessarily thought to be better and many rural communities have seen an influx of new residents as a result of a move away from the big urban centres and their problems. Modern technology is making it possible to operate at considerable distances from business centres, so long-distance commuting is a more common phenomenon.

It is worth noting that while the population of Scotland has decreased by approximately 100,000 in the last twenty years, the population of every region, except Strathclyde, Lothian and Tayside where the major urban centres are located, has increased. The population of Glasgow in the same period is down by 250,000 and Dundee and Edinburgh have each decreased in numbers. The exception is Aberdeen where there has been a slight increase, presumably in relation of the development of the oil industry in the North Sea. The population of Skye has increased by 20%. While close examination of the statistics would show a more complex picture, it is at least true to say that we are not experiencing widespread depopulation of rural areas.

It is not only the size but the nature of these communities which is changing. I was interested to learn that on one small Orkney island, the only children of school age are from incoming families. There is a more cosmopolitan flavour in the remote areas than ever before. Many of those now residing there are highly-educated and/or bring with them their considerable experience of the wider world. They are not the kind of people who are prepared to accept passively the status quo and whatever life has to offer. While some have chosen to relocate, others (particularly those employed in the oil industry) find themselves obliged to bring their families to settle in isolated areas and are determined not to place them at a disadvantage as a result. These people are very concerned about the provision of high-quality education for their children.

What has happened to policy?

The views of regional councillors have altered considerably. Closure of small schools is no longer an issue. Local authorities are anxious to be seen to be promoting the viability of rural communities and it is recognised that keeping the school open despite the costs involved is vital in this. Indeed, even though there has been pressure on local authorities to reduce spending, there is evidence of positive discrimination in favour of small schools in many parts of the country, which has

been translated into hard cash. Highland Region has recently increased education's share of the budget and much of the extra money has been used for the refurbishment of rural schools where, for example, disused schoolhouses have been converted to provide improved facilities and additional storage. Orkney and Shetland have both invested in a large number of new schools.

While composite classes have been accepted as a fact of life, the pupil-teacher ratio has continued to improve in the country as a whole. There have also been efforts to improve the staffing situation in small schools. Some regions have supported them by making an additional teacher available on a part-time basis.

It is now standard practice to make provision for teaching head teachers to have management time free of class responsibility. This has recently been increased in Fife to one day per week. In Highland Region since January, teaching head teachers with a probationer on the staff have been allocated cover for a half day per week to support the new teacher. Secretarial help is also standard in small schools and this has been increasing slowly.

Unfortunately, nursery provision continues to be negligible in rural areas, though it has increased in towns. Fife, proud of their record of 97% provision, have experimented by employing a peripatetic nursery teacher in a conscious effort to meet this need. It has proved an expensive exercise and not necessarily an ideal solution. Schools attempt to establish links with the local play group and where there is a community school, these links are strengthened by the play group's use of the school's facilities.

Despite financial constraints, authorities have tried to maintain the costly visiting teacher service where rural schools get the same share of specialist teachers of the expressive arts and of learning support as their urban counterparts.

Highland Region has pursued a policy of upgrading secondary school provision so that most high schools now offer education for six years. Boarding continues to be necessary, though it is less prevalent than it was.

The creation of the Western Isles Council during the reorganisation of local government in 1975 allowed recognition of a community entity which could look to its own resources for secondary education. Previously, mainland authorities had been hard-pressed to cater wisely for the distant parts of their territory. Many children had to be brought to hostels on the mainland for secondary schooling. After reorganisation, children were sent to the Nicholson Institute in Stornoway, which was an improvement, but which was still a long way from home for some. In many ways, these children were even being asked to experience what amounted to almost a different culture.

In 1978, the Council proposed a new six-year school for the southern Isles to be located in Benbecula. At first glance, this seemed to be an excellent idea, but it would have meant a rationalisation of several small two-year schools. The Scottish Office advised waiting for a few years to consider other options such as the possibility of allowing these small schools to grow in their community. Wait they did. The final decision was to go ahead with the new school, which opened only a few weeks ago, but the important point is that the local community, along with the local authority and the government, shared that decision as to what was the best way forward for the community as a whole.

The school in its community

The Scottish public has traditionally trusted the education service to get on with its job and to some extent it might be said that this had led to the service dragging its feet as far as community

involvement is concerned. The government certainly believed this to be the case and introduced a variety of measures designed to face the issue. A great deal has been heard about 'parent power' in the 1980's and accountability is the buzz word.

Where previously children had to attend the school to which they were zoned, the Parents' Charter allows parents to choose their child's school, provided that they meet the transport costs if they opt for other than the local school. It is certainly true that this has had an effect in some urban areas where parents have been voting with their feet and we are seeing some schools actively pursuing what amounts to a marketing policy to project a positive image in the community. A few small schools on the fringes of towns have suffered as a result of this freedom of choice, in that many parents have chosen to transport their children into town schools, where many still believe the children will get a broader experience, both academically and socially. I am aware of the recent closure of one small school in these circumstances. For most parents in remote areas, however, the Parents' Charter is a meaningless concept.

It is also true that local authorities will no longer consider making unilateral decisions about closure or merger. Strathclyde Region were obliged to reconsider a proposal for the rationalisation of several small schools due to public pressure. The impact of the new School Boards and Self-Governing Schools Acts remains to be seen. School Boards may be difficult to sustain in rural areas where there is a smaller pool of parents from which to find people able to sustain the required commitment and the danger of a small number of parents with vested interests controlling the board is magnified in the small school situation. At present, there appears to be no evidence of any significant difference in the percentage of boards established between urban and rural areas. There is an interesting debate going on in Orkney in relation to the merger of two schools on the East Mainland, St. Andrews and Holm. A group on the Holm school board are unhappy with the proposals for the new school and are organising a vote with a view to opting out formally. It will be interesting to see to what extent this small but vociferous group do in fact reflect the views of the community. The authority, meanwhile, are pressing ahead with the new school since the cash has been allocated for this financial year.

Throughout the 1980's, there has undoubtedly been an upsurge in attempts to develop a partnership with parents in the education of their children and to make the school at the heart of its community a reality. In many cases this has taken the shape of improved informal interaction between the schools and their communities and there are many fine examples to be found throughout the country. In some places, there has been a formal designation of the school as a community school with management shared by the Community and Formal Education Sectors. Such schools are to be found in both urban and rural areas.

The term 'community school' has a range of meanings from simply making the school's facilities available for use by the community to the advanced model now widespread in Orkney, where there has been a positive move not to separate provision for formal schooling and community education and leisure facilities. A kind of symbiotic relationship has been established. The school benefits not only from the extra space, but also from the nature of that space, e.g. they may have a large hall that they could not have had otherwise. Minibuses are at their disposal and more and better, electronic and sports equipment can be obtained. The element of voluntary commitment from the community leads to grant-aiding (e.g. from the Highlands and Islands Development Board) which would not normally be available to the school. Communities are encouraged through this model to make things work for themselves. While the head teacher remains responsible for the formal education in the building, the authority, through the School Board, has devolved responsibility for the day-to-day management of the concept to a Centre Committee or Local Community Association. They have been given real responsibility in having been granted 'key-holder status' in being able to make arrangements for any cleaning of the building which is necessary over and above the basic provision by the authority and where there is a

swimming pool, members of the community are offered training to lifeguard standard by the authority so that they can undertake both the administration and supervision of the pool. These measures can be very cost-effective and it should be said that many innovations are more to do with changing attitudes than with spending money.

Teachers have seen the potential for learning in the community school model and are making better use of the local environment and of local resources both human and otherwise. People are the most valuable resource there is in education and we should never underestimate their worth. I would like to pay tribute here to the Australian parents I have met and to those I have only heard about for the role they play in supporting their children in their education.

There are also many signs of outreach on the part of schools where they are giving to the community. One school in Orkney has renovated a group of old fishermen's huts and mounted an exhibition in them as a tourist attraction. Their efforts have been recognised nationally with an award for conservation. In Strathmigle in Fife, the Parents' Association and the local Community Association, in conjunction with the school, organised an early warning system when the river that ran through the village and the children's playground was in spate. They noticed while involved in this how dangerous the playground in general was and how faulty some of the equipment was. They set up an action group which has resulted in both achieving a new playground and in changed local government policy. It has set a precedent for future action groups and committees and has, in the view of the head teacher, enhanced the quality of life in the village. To quote her:

> *This project has been a lot of fun and a lot of hard work. It has taken me into the community rather than the community into the school.*

The role of the head teacher is vital in the development of the concept of shared ownership of the school. The Scottish Education Department recognises this in that one of the modules for the management training for head teachers currently being produced is entitled "The School in its Community".

Another new feature on the Scottish scene is that of adults participating in learning alongside pupils in secondary school classrooms. This is seen as having many advantages in that the children benefit from the interaction with the adults and vice versa. It is also much less costly than evening schools as we have known them in the past, especially in small rural communities where special provision of this kind was often not cost-effective.

The Curriculum

It has never been Scotland's way to consider a different curriculum for schools in rural areas and, in general terms, this continues to be true. What has happened in the 1980's, however, is most interesting.

Many curriculum discussion papers have been produced at national level, aimed at improving the practice in our schools. Running through them has been a preoccupation with how to provide appropriate and effective education for all - in whatever context and at whatever stage in the learning process the learner is at. The main issues might be presented as:-

a. the development of a caring, positive ethos with what has been known as 'the hidden curriculum' being much less hidden; taking an optimistic view of the learner;

b. knowing the children and the context well in order to provide opportunities for active learning which are meaningful and relevant and which make full

use of children's experiences and the local environment;

c. genuine group teaching and differentiated learning; and

d. highly developed management skills.

In other words, it seems to me that what has happened is that the features which have long been evident in the best small schools are being promoted throughout the country as a whole as the ideal.

It is disappointing that limitation of time does not permit further discussion of the curriculum on this occasion. The 1980's have been exciting times in terms of curriculum development in Scotland.

One major government initiative which I must mention is the review of the curriculum and assessment for the 5-14 age group currently being carried out by Research and Development Groups set up by the Scottish Education Department. They are compiling a set of recommendations on the content of the curriculum along with attainment targets. It is the government's intention to reintroduce national testing to our primary schools. We await their reports with interest, but as yet have no way of assessing the extent to which these deliberations will alter the face of education in Scotland.

Staff Development

As I have already mentioned, "accountability" is the word that has dominated the scene in the 1980's. Discussion about schemes for the appraisal of teachers has led to widespread concern throughout the profession. Again, we await the outcome of the government's deliberations based on reports and recommendations gathered in from the regions over the last year.

While teachers have been anxious about the negative aspects of these proposals, there is a positive side which needs to be highlighted. If staff are to be appraised then they must also be supported and the question of staff development programmes has become a major issue for local authorities. Whatever criteria for appraisal are eventually agreed upon will apply equally throughout the country with no distinction made between urban and rural areas. Therefore, authorities will need to give priority to the very real difficulty of providing staff development and support to teachers in remote areas.

The Colleges of Education also need to rise to this challenge. As I have said, Northern College is committed to increasing its knowledge and understanding of issues related to education in rural areas and to improving the service it offers in terms of both pre-service and in-service provision.

Through our pre-service courses, we are seeking to produce reflective teachers who see their professional development as a life-long process and who can analyse a context and plan and evaluate in order to be as effective as possible in whatever circumstances they find themselves. We have also sought to ensure that students get as wide a range of experience as possible including a placement in at least one small school during their four year course.

There is a move to provide flexible in-service education for teachers more directly tailored to their situation and their needs. This is often achieved by a member of the college staff going out to work in an area for perhaps a week at a time with a follow-up visit a month later. Usually, they will work with staff from a cluster of small schools in an area. We would like to see more interaction between these visits and this is the ideal opportunity to use distance learning techniques which we are currently involved in developing. A new course presently being validated is the Certificate in

Open Learning which seeks to promote open learning techniques and to provide people with the necessary skills for the development and delivery of materials. The mixed-mode course, a series of distance learning modules, together with occasional group meetings and tutorial sessions, is currently highly favoured. Along with the negotiated aspect of open learning, it certainly seems to offer maximum flexibility. There is an attempt to introduce a cascade effect in staff development by educating a few individuals, in courses which are part college-based and part distance learning, who can then go out and provide in-service in their school and/or region. These innovations lead to consideration of the relationship between award-bearing and non-award-bearing courses and the degree of credit transfer which might exist between them. This is an issue which is currently being addressed.

These developments go hand in hand with the new technological advances that are currently being experimented with. British Telecom, the Highlands and Islands Development Board and the Orkney Island Council are piloting an experiment in the use of electronic whiteboards to deliver courses directly related to local needs. Occidental Oil Company are considering its use for the delivery of courses on off-shore engineering to its workers on the islands from Robert Gordon's Institute of Technology in Aberdeen and Heriot Watt University in Edinburgh. Thurso Technical College is linked to the system and will be delivering secretarial skills courses to Orkney. Northern College is in the process of considering the installation of the necessary equipment to be able to join in offering this service.

Tele-cottages are becoming a reality in some remote areas and seem set to increase the viability of rural communities, allowing people to operate at a distance from both business and cultural nerve centres. The Orkneys are again seen to be leaders in this field.

One major change has affected the issue of staff development. Following the teacher's industrial action in the mid 1980's, a new set of conditions of services was agreed to by teachers in settlement of the dispute. There are now five days set aside during the session when teachers are in school without children present. These days are designated for in-service education. In addition, teachers are required to work an extra fifty hours per year with twenty of those hours set aside for personal, professional development. They are also required to be present outside normal school hours for thirty hours set aside for consultation with parents. Where schools in rural areas are concerned, one of the main benefits would appear to be the opportunity to interact with members of staff from other schools. There is a deliberate attempt to bring staff together on these occasions for discussion and in-service education. This can only serve to reduce the sense of isolation often felt by teachers in remote areas.

In Conclusion

I am conscious of the fact that I have done little more than skim the surface of what is a vast topic. I am aware that I have barely mentioned the tertiary sector and hope you will forgive the bias towards primary which is my own field. I have also made little recognition of groups with special needs.

I have tried to accentuate the positive but would not wish to give the impression that we have solved all our problems or that we are living in some kind of Utopia - even a rabid patriot would hesitate to make that claim. Many improvements can still be made. Education is about people and their lives and they are complex and rarely static. Many of our people are experiencing economic hardship too and that has its effect in both urban and rural areas. What I hope I have left you with is a sense of the challenge and excitement that being part of the education scene in Scotland in the 1980's has offered those of us that are involved with it. I wanted to let you know that both our rural areas and the education that is happening in them are alive and well and looking forward to the 1990's.

NATIONAL EXAMINATION OF THE COUNTRY AREAS PROGRAM

Laurel Larocque

The National Board's Involvement in Rural Education Issues

About NBEET

The National Board of Employment, Education and Training (NBEET) was established a little under two years ago as the key advisory body to the Commonwealth Minister for Employment, Education and Training.

The National Board operates independently from, although frequently in tandem with, the Department of Employment, Education and Training (DEET).

As an advisory body, the Board's work is principally, although not exclusively, determined by formal references from the Commonwealth Minister seeking advice on specific issues within his portfolio.

Rural Education and Training References from *A Fair Go*

The National Board became involved in rural education and training issues as a result of two references which came out of the Commonwealth Strategy Statement for Rural Education and Training, *A Fair GO* (April 1989).

As a result of the *A Fair Go* Statement, NBEET was asked to undertake two specific tasks:

1. examine the effectiveness of the Country Areas Program (CAP) in relation to the need to improve school participation and retention in rural areas and report on this reference by December 1989 (later revised to February 1990); and,

2. monitor the Commonwealth Government's Rural Education and Training Strategy (as outlined in A Fair Go) and provide a report by October 1990 which identifies achievements and gaps in the strategy and proposes possible new initiatives.

In response to these two ministerial references the National Board established the Working Party on Rural Education and Training. The Working Party has membership from the Board itself, three of the Board's Councils - Schools, Higher Education and Employment and Skills Formation - the Department of Employment, Education and Training and the Department of Primary Industries and Energy.

The Working Party has completed the first reference and the CAP report is the final outcome of that.

Work on the second reference has begun and and I have outlined at the end of this paper the processes which the Working Party has determined on for completing the second reference.

First reference - Examination of the Country Areas Program

As I said, the report on the Country Areas Program is the final outcome of the first reference. The report was accepted by the National Board and tabled in the Commonwealth Parliament on 16 May 1990. Its recommendations are now being considered in the context of the forthcoming August budget.

Considerations Affecting Final Outcomes of CAP Review

Before turning to the report itself, I thought it might be useful to highlight some of the main factors or considerations which influenced the final shape and direction of the report.

The Reference Itself

First of all, the initial reference from the Minister determined to a significant extent what the Working Party would look at in relation to CAP. This type of ministerial reference places a constraint on advisory bodies such as the National Board which independent academic researchers, who can define their own subject and parameters, do not normally have to confront.

In any event, the clear direction from the reference meant the CAP needed to be looked at in light of its effectiveness in improving rural participation and retention.

Participation

In relation to the "participation" question, the Working Party felt it was important to look not only at student participation but also at local community participation in the schooling process. The latter was considered to be of equal importance in terms of examining the Program's outcomes.

This did not present any real difficulties because the stated objectives of the Program include increased participation of students in educational, social and cultural activities as well as emphasising strong community participation in decision making processes.

Retention

The "retention" issue, however, was problematical from the start.

First, increased secondary retention is not and has never been an objective of the Program. It was therefore felt by the WP that it would be quite unfair to judge CAP's effectiveness in this regard.

Secondly, by far the majority of CAP funds are expended at the primary level and the focus of the Program in all States and the NT is clearly primary schooling. There are a number of reasons for this primary focus, not the least of which is the fact that there are substantially more primary schools in rural areas than secondary schools.

Again, it was decided that it would be difficult, to say the least, to draw any direct connection between the Program's effectiveness and secondary, particularly upper secondary, retention rates.

Nonetheless, rural retention rates were clearly a concern of the Minister's and needed to be addressed in some form.

The report argues that there is persuasive evidence that CAP has had a significant indirect effect on secondary retention through its capacity to substantially improve the quality of primary schooling.

Also, as something of a bonus, in looking at the data (and it was extremely difficult to extract, I might add!) over the period 1984-88 we found that - for whatever reasons - the rural Year 12 completion rates had risen rapidly and quite dramatically (by about 62% in four years, from a completion rate of under 35% to just over 55%) and that the strong upward trend was continuing in 1989. (See table at Attachment I) The comparable increase in urban Year 12 completion rates over the four years was half (33%) that of the rural increase.

It was possible then to shift ground somewhat. Instead of talking about CAP's direct impact on retention rates - which could not be unequivocally demonstrated in any case - we could pursue an argument for expanding the Program and calling for additional funding for the Program on the grounds of a "significant new need" resulting from a considerable increase in numbers of upper secondary students.

Early Decisions of the Working Party

A number of decisions taken by the Working Party early on in the review also influenced the shape of the final report.

The review would not be structured along the lines of a State by State comparison but would rather, attempt to capture a national picture of the strengths and weaknesses of the Program as it operated in diverse milieus, regardless of State borders.

Because of time constraints, the report would need to be clearly focussed on the CAP and could not or should not be a report on rural schooling generally. We therefore did not discuss in the CAP report a number of broader issues which were raised during the field visits. We hope to cover these issues in the report on the second reference.

The report would be positive in tone and recommendations would be directed towards positive action and build on perceived strengths of the Program. This approach obviously had considerable influence on the tone of the final report.

Two "process" decisions also influenced the review from an operational point of view:

A consultant was engaged jointly with DEET to undertake some survey work on the perceptions of principals, teachers, parents and community bodies about the effectiveness of the Program. The consultant's report, as it turned out, provided only minor input for the final report, although the exercise of collaboration between several Commonwealth agencies and a private consultant proved a useful adjunct to the review process.

Field visits to all States and the NT were essential - not only to lend credibility to the WP's report, but also to provide direct input from practitioners and community people on their own ground, so to speak. In retrospect, I would say that the field visits provided the most valuable input to the review process.

Considerations Arising During Course of the Review

Finally, there are at least two areas of discussion which were covered in the earlier 1987 Tomlinson review of CAP which the WP decided should not be included in the final report. These are Aboriginal education and the Commonwealth's CAP funding formula.

Aboriginal education - The decision not to directly address the question of Aboriginal education was taken for several reasons. For one, the Commonwealth and the States were, at that time, involved in negotiating funding arrangements for Aboriginal education as a result of the

Commonwealth's Aboriginal Education Policy. It was felt that that process should go forward without distraction from other quarters.

The WP also took the view that in terms of financial capacity CAP is simply too small a program to adequately address the broader general resourcing questions associated with Aboriginal education.

Nonetheless, the WP did feel that CAP was an appropriate mechanism for piloting programs of educational support services for remote schools, most of which are Aboriginal, and hence the recommendation for additional funds along these lines.

The funding formula - The WP decided that it would not comment on the formula which DEET uses to apportion CAP funds across the States and the NT. Although an issue of concern for some States, it was felt that this was a matter to be taken up directly with DEET.

Constraints on Financial Recommendations

One final constraint on the Working Party relates to all advice which the National Board provides to the Minister. That is, if Board recommendations involve financial allocations it is incumbent on the Board to specify where such funds might come from. From the Board's point of view, there are basically three choices here:

- new money, which requires Cabinet approval;
- a re-allocation of funds within the particular program; and
- a re-allocation of funds from outside the particular program but from within the DEET portfolio.

The Board opted for the latter position.

The Cap Report

I will talk briefly now about the report itself, present a summary of the Summary and Recommendations and then open the field up for questions.

General Conclusions

- The CAP has had a significant positive impact on the quality of rural schooling.
- The strength of the Program lies in the soundness of its underlying principles of

  - sharing resources on a regional or cluster school basis
  - effective community participation in the schooling process.

- The Program has significantly broadened rural students' participation in educational, social and cultural activities which would otherwise be inaccessible to them.
- Through CAP, structures have evolved which facilitate and support effective local community participation in the schooling process. This has been

particularly important in changing traditionally negative attitudes toward education held by many rural communities.

- The quality primary schooling that CAP has assisted in bringing about in rural areas has had a significant indirect effect on retention rates.

The report puts forward a number of recommendations designed to strengthen the Program and to respond to identified new needs within rural schooling.

The first four recommendations (See Attachment 2 Recommendations: Financial) focus on additional funding of $3.5m annually targeting three specific areas of need:

- broader and more relevant upper secondary education in rural schools (about 60% of additional funds);
- educational support services to remote school communities (about 30% of additional funds);
- national co-ordination of information dissemination and evaluation of major CAP activities (about 10% of additional funding).

The additional funding is broken up by percentages across the three target areas to give an indication of the relative priority attached to each by the Working Party.

The latter four recommendations are designed to improve the overall operation of CAP and focus on:

- adjustment to the funding cycle to facilitate effective forward planning;
- further devolution of decision-making authority on to local school communities;
- adjustments to the balance between funding for on-going projects and new initiatives; and
- where appropriate, system absorption of CAP initiatives which address enduring needs of rural schools.

Funding Cycle

The fact that CAP is only funded on an annual basis has, for many years, put considerable stress on those involved in the Program. Ideally, the WP would have preferred to recommend triennial funding for the Program. However, governments particularly in the current economic climate - resist the form of Budget "lock in" which triennial appropriations inevitably produce. As a compromise, the WP recommended forward commitment arrangements which would put CAP funding on the same basis as that for the Disadvantaged Schools Program.

Devolution of Decision-making Authority

The Working Party was strongly of the view that the Program operated most effectively in areas where there was strong community participation in and control over the decision-making processes of CAP - identifying local needs, establishing priorities and allocating funds.

The report points to four main 'necessary conditions' for effective community participation:

- small (say up to 10 schools within reasonable travelling distance from one another) local cluster committee structures;
- direct control over at least a portion of the area's funding allocation;
- adequate support mechanisms, for induction, information dissemination, submission writing and so on; and
- community representatives placed in positions of real authority on local, area and State committees.

Second Reference - Broad Examination of Rural Education and Training Provision

Work Program

1. Direct call for submissions from about 250 agencies attaching short background briefing paper on scope of task and major issues to be examined.
2. Advertisement in major national dailies and rural press inviting submissions from individuals and community groups. (A very strong response).
3. Consultations with major interest groups and State agencies - July and August.
4. Proposed seminar/workshop (August).
5. Review of DEET programs and policies relevant to rural education and training.
6. Consultations with DEET on wider policy issues, particularly co-ordination and consultation mechanisms.
7. Input from PAIC.
8. Interim report October 1990.

Estimated Year 12 Completion Rates
In Rural Australia, by State, 1984 and 1988

	1984 %	1988 %	% Change
NSW	31	47	+52
Vic	32	61	+91
Qld	37	61	+65
WA	35	45	+29
SA	42	74	+76
Tas	24	36	+50
Australia	34	55	+62

Source: Program Review and Income Support Branch DEET. Calculated from raw data supplied by State education authorities and ABS. Comparable NT data unavailable.

Recommendations - Financial

1. In view of the widespread success which the Country Areas Program has had to date in promoting positive attitudes toward schooling and in light of the new demands being placed on rural schools, funding for the Program be increased by a total of $3.5m to $15.0m annually. (p.15)

2. In recognition of the current upward trend in secondary retention and completion rates in rural schools and in order to cater more adequately with the increased number of rural secondary students, about 60% of the recommended additional CAP funds, or $2.2m, be provided to support new initiatives in rural schools which facilitate retention beyond the compulsory years. The focus would be on strategies developed co-operatively in a region and which could apply to a number of secondary schools. (p. 18)

3. To assist in the provision of educational support services to remote school communities, about 30% of the recommended additional CAP funds, or $1 .Om, be made available to those States with a significant proportion of remote schools. (p.19)

4. As a measure to capitalise on the national breadth of the Program and to ensure effective communication across the States about successful CAP projects, about 10% of the recommended additional funds, or $0.3m, be allocated to enable the Commonwealth to co-ordinate information dissemination across the Country Areas Program and national reporting on evaluations of major CAP initiatives. (p. 19)

Recommendations - Operational

5. To assist effective forward planning, the States be permitted to make arrangements for forward commitment of 70% of projected annual funding for up to two years beyond the current year, provided that measures are adopted to ensure that projects and services funded through CAP are scrutinised annually in relation to their priority for CAP funding. (p.21)

6. All States be asked to re-examine CAP administrative structures to ensure local community participation in and responsibility for identifying local education needs and allocating funds for projects and services to alleviate those needs. (p.23)

7. In relation to projects and services which are on-going and which might be funded from other sources or which may not require funding on a recurrent basis, State, area and local committees aim to include, within the project brief, a strategy for phasing out CAP funding. (p.24)

8. State government and non-government education authorities be encouraged by the Commonwealth to further absorb into education systems those successful CAP initiatives which, over time, have become part of the on-going provision of educational support services in rural schools. (p.25)

A MODEL FOR REMOTE AREA EDUCATION

Richard Smith

Preamble

In this paper we do three things. We begin with some observations on the concept of "rural" education and argue that the concept is subsumed by the principle of equity. Next we outline the Remote Area Teacher Education Project (RATEP) as a model of remote area education course construction and delivery. Finally we draw some implications for research into rural education.

Introduction

One of the problems addressed in the Keynote Paper at this conference is that of definition, or rather the failure to agree on a definition of rural education. The point is made that "rural" is very differently defined in different countries and by different experts depending on their interests and disciplines. Indeed, it would seem that a search for an essential definition is fruitless and even if it were possible to discover the essence of "rural" it would be so vague as to be useless for any practical planning purposes.

A different approach could be to ask "What is at issue here? Why is rural education a problem?", or even more fundamental, "Is it a problem?" It certainly was not such a great "problem" for us until we read the Keynote paper! It could of course be said that inner city education is also a "problem" and so on. The point is that there must be some issue of principle that allows for the demarcation of rural education as a problem. In addition, there should be some conditions that enable the identification of the principle that is applied.

Now it seems to us that one could find economic principles such as the extra cost of rural education, or statistical principles such as the size of the rural population and distance from large cities/centres. But these principles, though they may be contingent, are not central. What the debate is about it seems to us are the two principles of democracy, namely equity and freedom. If rural parents and children had a fair educational deal and were not disadvantaged, however one would put it, there would be no need for this conference.

The definition of the issue of rural education arises necessarily from a moral political concern. There is a deep-seated belief in this society in the principle of equitable distribution of life chances and options through education and in the right or the freedom of communities and individuals to make choices and to have input into these life options. But principles alone are not sufficient to identify a problem. If inequalities are to be identified, and that is what we are on about at this conference then there must be symptoms of the inequality criterion that can be applied.

There are empirical conditions of various kinds such as retention rates, attrition rates, achievement levels and so on like those set out in the Schools Commission Disadvantaged Schools Program. Principles and empirical knowledge are necessary to generate solutions in policy areas. Too often in the past there have been attempts to formulate educational policy solutions based on principle that lead only to further definitions; or to drive solutions based on empirical generalisations, a self-defeating strategy. But there is an order to principles and empirical conditions. Without principles that provide moral political direction, empirical conditions are incapable of generating policy.

A consequential difficulty is that the principles of democracy, equity and freedom, clash. The Rawlsian proposition illustrates what we mean, namely that educational (or any other) resources should be allocated equally except where this disadvantages the least advantaged.

The point here is that decisions about disadvantage and the steps to be taken to remedy it hinge on a comparative criterion. The allocation that Rawls refers to must account for both individuals and groups. For instance, one may even up the numbers of female and male teachers in a state system, thus creating some equality between groups, but individuals within the groups may remain relatively disadvantaged. The allocation problem is more difficult of course when the focus is on life chances or educational knowledge. But it is not intractable. What emerges is that decisions about the redistribution of resources to the least advantaged imply a comparative criterion for the "normal" and over-advantaged. The criterion must be explicit especially in research settings.

Confusion about the principles and conditions which define "rural education" and the failure to face the implications of such confusion are compounded when the problems of knowledge and pedagogy are considered. We refer here to models of education which separate curriculum design and development from teaching functions; static conceptions of knowledge; behaviourist conceptions of learning; the replacement of "knowledge" by skills training; and centrally designed programs that are "delivered" to parents and children. These characteristics have affected all Australian education, but those who receive it at a distance, like isolated (rural) populations are disadvantaged in multiple ways. Closed curricula and closed pedagogies preclude interaction.

Any reform in the provision of education to isolated communities must, in our view, address both the equity principle and the top-down curriculum model so that teachers, parents and students have space to make their voices heard. This is not an argument for locally constructed curriculum, but a case for taking account of local conditions, including the entry point of the students whether young or adult. It is based on the assumption that learning, like car-making, is best done when those who are most involved have a say that counts. Freedom, like equity, is not absolute, but involves choices.

The communities of Cape York and Torres Strait can be placed at the centre of the rural "problem", or, rather, the equity problem. The comparative principle discussed earlier is not difficult to sustain empirically for these groups. It is easily documented on several counts: racial discrimination, land alienation, commercial exploitation, cultural marginalisation, lack of freedom to make choices and geographical remoteness. The empirical conditions are readily identified by the people in the communities and by observers such as ourselves. Part of the redistribution of resources according to the equity principle involves education, although it must be emphasised that education alone cannot compensate for the social, economic and cultural conditions of the larger society in these communities or anywhere else. But education can increase options, awareness and choice. It is the conditions of inequality and lack of choice that the Remote Area Teacher Education Project (RATEP) is designed to address. We now outline the structure and form of RATEP as a model of remote educational provision and a source of potential research activity.

The Remote Area Teacher Education Program (RATEP)

The Remote Area Teacher Education Project is the name for a program to prepare and deliver higher education teacher education courses to Aboriginal and Torres Strait Islander students on-site in very remote locations. It is an affirmative action initiative in an area of national priority. Its more general purpose is to remedy an historical lack of higher education provision for people in Far North Queensland and Torres Strait.

The original proposal for such a program dates from 1987 when a staff member of the Department of Social and Cultural Studies in Education at James Cook University of North

Queensland undertook a needs analysis in Torres Strait. Before that, such an initiative had been a vision of the now Peninsula Regional Education Director, Mr Frank Young. It is a program that has been waiting to happen for over a decade.

The 1987 proposal was that a 3 year Diploma of Teaching award could be offered to Torres Strait Islanders on site at Horn Island, near Thursday Island. The model was one in which students would alternate study on-site, in their communities and on campus at James Cook University.

The proposed Torres Strait students numbered approximately 40. These students possess teaching qualifications gained in a period when courses leading to fully trained teacher status were unavailable to them. Their need is that of up-grading so that they are eligible for standard teachers' salary, conditions and promotion. In addition, they would then become eligible for senior positions in Torres Strait schools, a community aspiration of some importance.

In 1988-89, a more far-reaching plan was formulated to offer a more comprehensive program to both Aboriginal and Islanders through the combined efforts of Cairns College of TAFE and James Cook University in conjunction with Brisbane College of Advanced Education, now a campus of the Queensland University of Technology. The model was one in which RATEP would provide a sequence consisting of a one year Certificate, a two year Associate Diploma, a three year Diploma in Teaching, and ultimately, a four year degree.

The notion is that the Certificate and Associate Diploma awards of TAFE should be articulated with the Diploma and Degree of James Cook University to provide continuity and small increments each of which leads to a professional credential. The step-by-step approach has the added advantage of students being able to obtain qualifications that enable them to work as Community Teachers at each level on the way to a fully accredited teaching credential. A further institutional advantage is that the necessary award articulation requires cross-credit provisions and some joint planning at the second year of the Associate Diploma. For isolated communities where the provision of expensive higher education facilities is limited, the latter is an important breakthrough in the conceptualisation of educational provision.

An additional feature of the RATEP model is that the bulk of the program is to be delivered in communities thus obviating the need for students to leave family and community support networks. Separation of students from their communities has been identified as a major source of attrition in Aboriginal and Islander teacher education programs at both Cairns College of TAFE and James Cook University. The planning group was also aware of the National Aboriginal Education Policy recommendations along these lines. The question in 1988 was how such a program could be delivered, given the knowledge that text-based programs were almost certainly bound to be inappropriate for the target students.

A solution appeared in the form of the Queensland Board of Advanced Education Working Party on Open Education in 1989. One of the authors (Smith) was a member of the Working Party committee. This committee had the task of establishing guidelines for "open learning" in Queensland; the establishment of sites for course delivery, called Open Learning Centres; and pilot projects to investigate the possibilities of information technology-based "open" education in Queensland. Given the dilemmas of course delivery faced by the RATEP planners, the new elements in the Open Learning Centre Project were those of courseware construction and delivery using information technology and the insistence on institutional cooperation. Professor Smith instantly recognised that this mode offered a real possibility for RATEP development.

In 1989, a proposal from the RATEP planning team to the Working Party received funding support for 1990-91 under the provisions of the Queensland Open Learning Network pilot project plan. James Cook University became the host institution for RATEP. Reference and Management

Groups were established with wide community involvement including the Aboriginal Consultative Committee, the Islander Coordinating Council, the Torres Strait Islander Regional Education Committee, the Queensland Aboriginal and Torres Strait Islander Consultative Committee, Cairns TAFE, the Department of Early Childhood Education at Brisbane CAE (now QUT), the Queensland Education Department, the Department of Employment Education and Training and James Cook University. The three educational institutions were given responsibility for course construction and community consultation took place with QATSICC. Perhaps the most enduring outcome of the cooperation between the stakeholders are the unintended consequences of collaborative effort in the education field that RATEP has engendered.

The mission of RATE-Project under the Open Learning Centre Network is to prepare and deliver courseware using information technology via four Open Learning Centres in the very remote sites of Badu and Yorke Islands in Torres Strait and Aurukun and Hopevale on Cape York Peninsula. The OLC's however belong to the Open Learning Network and not to James Cook University or the Queensland Department of Education. They are therefore available to any Queensland institution for the delivery of courses. In this respect, the OLCN mission complements the original and continuing commitment of RATEP to provide a full 1-4 year program in teacher education for remote area Aboriginal and Islander people. This sits comfortably with the OLCN social justice and equity provisions of increasing access and participation in higher education for all Queenslanders.

While the Open Learning Centre Network provided the funds and the mechanism of OLC's for courseware delivery, the problem of how to do it remained. In 1989, the courseware development medium was confirmed as Authorware Professional, a multimedia software package. The decision was largely due to Professor Smith's investigations of MS-DOS and Macintosh-based hardware and software and demonstrations of distance education technology. He was sceptical of the view that information technology-based course materials for adults had to rely on real-time contacts between students and on-campus tutors. It seemed abundantly obvious that on-campus tutors could not rely on communication with students as they studied. His preference lay with the interactive multimedia software that was available but very "new". His views were confirmed by private demonstrations of such software running on up-market Macintosh hardware arranged by the Byte Centre in Brisbane.

The appeal of this type of information technology was the combination of colour, sound, graphics, video, text, interactivity and animation that were possible with massive memory capabilities. He saw the possibility to transcend the restrictions of text-based external studies where he had years of experience both as a recipient student in Papua New Guinea and as a tutor-provider at the University of Queensland for over a decade.

Consider the problem of distance education, especially for the clientele we have described, in the following terms. Off-campus higher education instruction is founded on the provision of text-based materials. Typically they consist of instructor's notes and commentaries which direct the student's attention to set readings and additional library based resources. Students are expected to read the notes and to work through set readings, usually alone, and to submit pieces of assessable text. Some institutions, especially the Distance Education Centres, have augmented these procedures with VCR material, electronic mail and teleconferencing.

The major problem with this model is that it is essentially static and students can be left guessing at what the instructor really means when s/he recommends reading Blah's (1989) chapter on the interdiscursivity of a non-essentialist Marxism or the like. The difficulty is that of the instructor specifying, exactly, what she thinks the student should do in the overall framework of the course. There is a wealth of sociological research in education to show that the assumption that a student simply "knows" what to do (or is stupid, dense, etc) discriminates heavily against those students who lack the dispositions and skill to recognise what is required.

That is, text-based courses of this kind assume the existence of learned characteristics and disposition that make up what is sometimes called "cultural capital". There are few doubts that such a mode for Aboriginal and Islander students is a recipe for disaster on two counts: they will drop out of the course and it is probable that instructors will simplify the material to the extent that it becomes a shadow of what it is supposed to be. Aboriginal and Islander people can ill-afford either of these possibilities. We rather feel that the same may be true for other isolated students, especially in rural areas, where an analytic text tradition is exceptional.

An additional problem with "external" courses, especially the text- based, is that they are linear. They move from notes to readings from readings to notes: from both to assignments and so on. The links between concepts and theories are in the instructor's head or his intentions, but they often remain transparent or implicit for students. Students are frequently left with the task of synthesising from a weak knowledge-base when the teaching job is that of helping them to make connections.

Further, students learn in different ways as any Early Childhood or primary teacher will affirm. There seems to be a certain amnesia about this on the part of tertiary educators when adults are the students. Reading abstract material and having conversations with oneself is one way of learning but it is not universal. As well, there is an increasing awareness and interest in the probability that contemporary information technology predisposes people, especially the young, to resonate with colour and movement, sound and graphics as well as text. One might speculate about the effects of information technology in remote communities. But there can be little doubt that its effects are there given the pervasiveness and interest in TV, radio and videos even in places as remote as Badu and Yorke Islands. The establishment of BRACS centres in such remote communities can only heighten this impact.

Consequently, the first principle of RATEP pedagogy in courseware construction is that of multimedia. Authorware and Apple's own Hypercard provide the possibility that students will use all five senses in their learning, in their own way. Materials can be organised so that text, sound, graphics, animation and video can complement each other.

In the early stages of RATEP, video is under-utilised because of constraints imposed by copyright issues and ambiguity about laser-disk and CD-ROM technology.

The second principle of RATEP pedagogy is that materials are integrated. Because of the flexibility of the software and the hardware, the various media can be combined into a single interconnected package, or what is called hypermedia. This means that the various media are arranged so that the course material is in a non-linear, stratified form. A student can work at multiple levels of detail in a hypermedia environment. For instance, a map might be connected to text, to animated explorers' routes and to an instructor's voice-over to create a thematic element so that one or all these media are available at the one time. In one American example (using Hypercard), a single period of history is investigated via "guides". Each "Guide" is a typical actor of the period like an Indian, a soldier and so on. Students follow seemingly different paths but each guide's perspective is linked to the others so that events, dates, attitudes etc. are integrated. RATEP subjects aspire to this hypermedia form in which there is no "beginning" or "end" as such.

The third principle of RATEP pedagogy is that of interactivity. The potential of the software and hardware is that it will break linearity and a one-way model of communication. Students should be able to make decisions about moving sideways, ahead or backwards in subject-matter; and have the opportunity to respond or initiate at most stages. Most importantly, students might be asked to provide the content of some of the packages. Take the case of 'child development' in Torres Strait. There is very little indeed written about this key area for teachers in the schools. The students may well be asked to generate some data which can be entered into the courseware package and then

used in the remainder of the course.

The fourth principle is that of cultural relevance. The necessity to have materials that are culturally recognisable is well established. The multimedia elements of RATEP courseware production makes it possible to routinely use graphics that show local landscapes and people; video (VCR for now); Aboriginal and Islander speakers for voice-overs and commentaries including perhaps local languages. Course-writers ideally will visit the communities for which they writing and will use cultural referees on campus. Further, each OLC has a tutor who will coach students and each one of whom has had close contacts with the course-writers.

Nevertheless, despite the commitment of this principle, there is much to be done at this stage to ensure that the courses and the way they are taught will connect with Aboriginal and Islander teachers and teachers-to-be. The issue is complex and difficult because (1) there is so little readily available area-specific material in contrast to generalised rhetoric and (2) higher education work by definition transcends the local and the particularistic. No doubt the RATEP evaluators will reveal how well RATEP has satisfied this principle.

The fifth principle of RATEP course-writing is that it is experimental in a relatively strict sense of the word. That is, the more general aptness of the technology for the target learners and indeed for the participating writers is both an empirical and a moral political issue. It is so new and so strange to many that its impact and potential will have to wait until the data are in. As Karen Wright (Scientific American March 1990) has remarked, "the convergence of computing and communications technology is characterised by a wealth of possibility and a dearth of direction". The pay-off is unknown at this stage. What we do know from he experience at James Cook University in early 1990 suggests that once the coursewriters have done their apprenticeship on the technology, they enter a period of quite fundamental reassessment of their own pedagogy and curriculum models.

The sixth principle of RATEP is intuitively self-evident but easily ignored. It is that the impact and success of the program will depend on the course-writers and on-site tutors. These are the strategic pieces in the web of technological tools for combining knowledge and pedagogical elements because it is they who will provide the entry into the courses and support for students.

RATEP courses which make use of information technology in courseware design and delivery then have no prescribed form but will take on a range of appearances such as these:

1. Teacher presentation tool: like doing a lesson or a program at a distance.

2. Stimulus material: data provision and materials for students to use and to generate student activities.

3. Pre-programmed environment: assistance for students to move around within for example theories and concepts.

4. Data bank: of visuals and texts.

5. Student reporting tool: students manipulate graphics, text etc to demonstrate knowledge acquisition.

6. Integrated package: seamless web of inter-connected knowledge components structured by teacher but with interactive potential.

All of these (and probably others we have not yet thought of!) are legitimate inter-active

multimedia technology forms. Ultimately, when the "Gee Whiz-ing" over the technology has run its course, there is the realisation that the technology is a tool for teachers to use in organising their "content" and for tailoring possible and probable learning experiences. It is also a "navigational" template for relating parts of a course, elements of knowledge and student activities. Coursewriters, who often express a feeling that they "lack direction", emphasise the fact that all technology needs to be learned. There are no Grand Designs for courseware writers in RATEP, yet.

RATEP then should be viewed as an affirmative action program in the first instance. But the broader perspective is that RATEP is a test- case of a new way of conceiving the "what" and the "how" of higher education. It questions, challenges and stretches orthodox views of what to teach and above all how to teach it. In this sense, RATEP coursewriters, students and on-site liaison-tutors are making history.

Implications For Rural Education

In summary then RATEP depends on four key elements: planning and development in a fuzzy environment; community needs and interests which are supported at institutional and governmental levels; the use of information technology and centrally, course-writers who operationalise the technology and political goals and tutors who will support the teaching function. RATEP is at an early stage of development and is incomplete in all its facets, but some implications for rural education research can be proposed.

First, standard solutions to the seemingly intractable educational problems in remote areas do not seem to work all that well no matter how much external-mode educational provision is available. The new element in RATEP, the point of maximum intervention as it were, is the technology. Certainly it comes with its own bag of problems and agendas. But as has been suggested earlier, it comes with new hopes, fresh perspectives and new inventiveness. Interactive multimedia information technologies as an educational form bear investigation for rural education provision.

Second, the technology is so new that centrally contrived educational programs, especially for adults, need to be reconsidered. RATEP is so far into uncharted waters that the priority is to emphasise what course-writers do best that is, design courses, gather resources and write teaching and learning programs. But the technology is not intuitive. It must be learned in task-specific applications. There are huge research areas here concerned with curriculum and pedagogy rather than technology as such. Third, the RATEP experience demonstrates that educational provision is so complex and touches on so many interests that there must be collaborative effort on the part of the State Education Department, higher education institutions, communities, Commonwealth government agencies, course-writers and local tutors. Disparate interests can be focussed if there is a common objective. Research on both the mechanisms of such projects and the interests that mobilise them is crucial.

Fourth, traditional concepts of curriculum and pedagogy are challenged by the combination of new communications technology and collaborative projects. RATEP has shown that a reformation is necessary in standard teacher education pre-service and in-service programs. Given the potential diversity of rural educational needs, this in turn implies a possible rethinking of higher education program frameworks. There needs to be systematic research in this area which studies the boundaries which hinder or facilitate broad-based programs.

Fifth, what we have advocated as a model for rural education provision is neither easy nor fool-proof. But visions like RATEP are necessary if the educational needs of the 1990's and beyond are to move out of the present rhetorical swamp. There is a need for action research that is both theoretically informed but task-directed. W. H. Auden's "Make action urgent and its meaning clear" is a motto to be writ large during this conference.

TELECOM'S INVOLVEMENT IN RURAL EDUCATION

Noel Ryan

Thank you for inviting Telecom Australia to address this 'Think Tank' conference today.

I must say I love the communications representation which appears on the letterhead of your Rural Education Research & Development Centre with the single wire earth return telephone service which was so critical to the early development of rural Australia and the satellite service which is so crucial to the development of remote Australia today. The technologies span my 40 years' experience in tele-communications.

As one who has benefitted so much from higher education even though I attended Queensland University after obtaining technical qualifications, I must congratulate you in putting so much effort and energy into the investment in the future of Australia.

My eldest son obtained his Associate Diploma in electronic engineering a few years ago from the then Darling Downs Institute of Advanced Education while installing the telecommunications microwave systems which now span Western Queensland from St. George to Hughenden; so I have a great affinity with the thrust of this critical conference.

From reading various research papers and the contents of this conference it is obvious that the 'industries' of education and telecommunications are on convergent paths which logically must bring them closer and closer together.

Also, both industries must use the latest in technology to survive and thrive.

As educationists, you must be shell-shocked by the knowledge explosion. How do you handle the exponential growth in information? How do you structure a system to enable you to impart new concepts and new ideas to students in a world of ever increasing complexity and diversity, and in a country with such a low population density per square kilometre. We in Telecom sympathise with you.

To many people, telecommunications, as part of the wider field of information technology, is the devil which has and can deliver such a huge volume of new information on a bewildered world. For example, for our latest technology - the optical fibre cable - we have not discovered its ultimate carrying capacity and Telecom Australia is a world leader in this technology. By 1992 we will have almost ringed Australia from Cairns to Geraldton.

But I put it to you, the proper use of telecommunications should also be seen as the guardian angel which can guide you and your students through the maze to the goal of true knowledge.

I firmly believe that the creative use of modern telecommunications will be essential to the development of education services - whether rural or urban based.

In my address this afternoon I will give examples of what tele-communications can and is doing for your industry, what Telecom services are available and how you might build them into your structure.

Before doing so however, I would like to clarify some comments in the 'State of the Art' keynote paper for this seminar, which I had the opportunity to read earlier this week.

I applaud that document for its comprehensive effort to stimulate new ideas at your conference. However, in the interests of academic accuracy, let me indulge in correcting one of the underlying assumptions in the section on technology.

In theme two - "Technology" the paper states categorically that telephone services to rural and isolated homes misrepresents reality, allegedly because many families contend with a manual party line shared among three or four other users or, alternatively they are serviced only by unreliable high frequency radio.

The facts are that today in Australia there are only 1,130 Telecom customers attached to manual exchanges - and in Queensland only 250 customers are still on manual exchanges.

The days of the antiquated manual exchanges and party lines are all but dead in Australia. They have been dying since Telecom Australia began a $530 million capital works project in 1984 - half of it in Queensland - and they will be interred for eternity when the programme is completed next year. In country Queensland there will not be one manual service or party line by December next year.

This achievement is far different from other developed areas of the world - for example Canada where in Ontario 20% of the services are still on multi-party lines and New Zealand which still has party-lines close to Wellington.

Australia leads the world in this field and we are now beginning to export this technology to other countries - many, more economically developed than we are - who so far have been unable or have chosen not to provide these services to their rural populations. Two weeks ago I met the Deputy Communications Minister for Saudi Arabia who was in Cairns to look at this technology.

I concede that some Australian communities, mainly in the Northern Territory and Western Australia, are still using high frequency radio links but they are being addressed through the rural and remote areas programme and they will be connected to the Telecom network some time next year.

There is another conclusion in the technology chapter of the paper suggesting that Australia's excellent telecommunications network may be under-utilised by education providers. This I firmly agree with.

Now that we have clarified some of these facts, I can assure you that, in the area of telecommunications at least, you do have the technology to do virtually anything you want to do for education in rural areas and you have the total support of Telecom Australia to deliver.

If you can identify services the education system needs from the tele-communications industry, Telecom will help you find the solutions.

I am sure that most of you have a fairly intimate knowledge of many of the telecommunications applications already being used by educationists in Australia.

Following on the pioneering work of the School of the Air, Telecom is actively engaged in various projects to improve educational opportunities in regional, rural and remote areas.

We are taking part in a series of trials with various education providers - including the Education Department here in Queensland, the University College of Southern Queensland in Toowoomba, The Queensland University of Technology, the University College of Central Queensland and the Adelaide College of TAFE - to provide tele-education to remote students.

In another project, we are helping to broadcast education programmes to five communities in the north-west of South Australia through Imparja TV.

The Queensland Education Department has been quick to see the advantages of modern telecommunications to the education system and is probably several years ahead of most other States, with the possible exception of New South Wales.

Only last month the Queensland Minister, Paul Braddy, signed a service provider agreement with Telecom to continue using our product, Keylink, to connect the biggest electronic educational network in Australia.

The Department now has more than 2,000 Keylink "mailboxes", including users in all high schools and approximately a quarter of State primary schools and I understand the service is on-sold to the Catholic Education System.

One of the applications of this network is a Telecom sponsored project called "Writers on Line" - an international literacy year idea which allows students to communicate directly with recognised authors through their computers.

The first author to join the project was the South Australian children's book writer, Gillian Rubenstein, and the next is Queensland author and journalist, Hugh Lunn.

These types of services obviously open up new vistas and opportunities for students and teachers in rural and remote communities.

I will not attempt to give details, but I understand also the Department is now finding new and exciting applications for Keylink in curriculum areas.

Anecdotal evidence suggests some schools have had difficulty in lifting the levels of involvement and the quality of activities on Keylink. Some students in the early stages apparently rarely went beyond the "Pen Pal" stage.

Other schools have had completely the opposite experience, with students engaging in fairly sophisticated and productive activities.

In order to encourage all schools to use Keylink in a more productive way and to help fully participating schools to find "like-minded" sibling schools, the Department is now planning a series of co-ordinated activities, with at least one major project each term.

These few examples show clearly that telecommunications services are available to educationists and that you can take advantage of them if you know where to find them.

This leads me to the next point .... what services are available?

Regarding my earlier remarks on Telecom's Rural and Remote Areas Programme, virtually all telecommunications services are available, or will shortly be available to all schools and, indeed, even to individual students on remote properties and homesteads.

The range of facilities and products for education applications cover the entire spectrum - audio, text and graphic, computer and even video.

Rather than perhaps bore you further with a list of products you might consider, I will refer you instead to my colleague, Dr. Geoff Jones, from our corporate customer division, as the contact for a

new product concept called Edulink.

Edulink is designed to provide a telecommunications and communications focus for all individuals, groups and institutions involved with the education industry.

It is your gateway to the total range of Telecom's network services and products.

We are not totally altruistic. But neither are we a corporate shark.

It is actually part of Telecom's charter with its owner, the Australian people through the Commonwealth Government, to improve telecommunications services in a manner which enables all Australian industries to compete more effectively and efficiently both domestically and internationally.

We believe that a better education system, more attuned to the demands of today's technological world, is an essential aspect of that imperative.

So we promise and we will deliver telecommunications on an equitable, efficient and cost effective way as required on a national, state or regional basis to enhance teaching and learning opportunities for every Australian classroom.

We have shown our bona fides on that score by contributing to the cost of a manual for the Queensland Education Department's Keylink users explaining how they can prepare much of their activity before logging into the network and therefore cut their costs by reducing the time they actually spend in the Telecom network.

I hope that Telecom's Edulink and the advice it can give you will be an integral part of the future directions you draw up from this conference.

Turning to the third and final theme I proposed at the outset, it remains for us to consider how the efficient use of telecommunications can be built into the education system for rural areas.

Some work has already been published on this aspect, particularly as it affects tertiary external studies for Australia's 53,000 distant education students.

In particular, I refer to a paper on "National Access to Distance Education" produced by Geoff Jones in collaboration with Dr. John Dekkers, from the University College of Central Queensland, and published in the Telecommunications Journal of Australia, Volume 39, No. 2 of 1989.

Jones and Dekkers argued that the restructure towards a more efficient, effective and equitable system required a learning/teaching network that is technology driven.

They propose a theoretical interactive infrastructure based largely on the existing distance education centres extended to embrace a model student support system.

Their national network would meet all requirements, from course development and delivery, through education services such as library access, tutorial access and computer access through to administrative services including student registration and fee payments.

In looking at the future application of telecommunication technology in rural education, I suggest one of the primary requirements will be a co-ordinated focus.

Telecom is examining its national network and about to invest multi-millions in network

modernisation. Therefore your future requirements are a vital input to our planning processes, especially facilities and their delivery points.

No telecommunications network, no matter how well designed it is, can cope efficiently with a fragmented group of customers using inappropriate and sometimes incompatible equipment or systems.

Educational networks on a regional, state or interstate basis will need to be developed in a co-ordinated manner which addresses these potential problems.

This leads us directly to the funding of appropriate classroom or teacher equipment - an area I should leave to you as the experts in the field. Let me say simply that you will need to consider the source of funds, whether from government grants and subsidies, user-pays approaches or, perhaps, even corporate sponsorships.

Finally, I would like to suggest that considerable emphasis should be placed also on proper and professional training of teachers in how to utilise the telecommunications network.

The importance of the human element in the successful adoption of efficient technological solutions for tele-education and the life has, it seems to me, been too often neglected in the past.

The teachers, the students, the curriculum planners and their administrations all need to be familiar with the technology they are using. They need to accept it rather than mistrust it.

Telecom has already begun some work in this area with Dr. Roy Lundin's Department at the Queensland University of Technology.

This project hopes to design training courses to position teleconferencing as a second nature mode of operating - a natural method of communicating so that educators and students can direct their energies towards teaching and learning.

Teleconferencing can be used in a variety of ways and the application for such services is limited only by imagination. Telecom provides several ways of connecting audio teleconferencing.

- These include conference calls connected by Telecom operators and a new facility known as Conferlink; whereby customers can purchase equipment from Telecom and arrange teleconferencing at their own convenience.

In fact, the Queensland School of Distance Education is currently trialling Conferlink systems which have the capacity to interconnect sixty-eight students in one group, or in a number of sub-groups, anywhere around Australia or around the world.

In conclusion, therefore, I suggest there is much for you to consider.

I repeat that you have a complete, modern telecommunications network at your fingertips; in Telecom you have a world expert telecommunications provider keen to help you solve any problems you encounter, and keen to adapt the network to your needs.

In closing, I will repeat to you the commitment I made to the rural community in Roma two weeks ago:-

- Telecom will be around for a long time and will continue to serve country Australia to the best of its ability;

- We are committed to developing a closer relationship with our customers, especially our rural educators and customers; and

- We will mature our approach to meet the changing needs of our customers so that we provide an outstanding level of customer service.

I wish you well in your deliberations and I know together we can make a worthwhile and productive contribution to the future of Australia and all Australians.

Thank you for your attention and the opportunity to speak to you.

PART III

"THINK TANK" PROCESS

THE DISCUSSION AND DECISION MAKING PROCESS

Jack Walton

One of the objectives of the `Think Tank' was to allow as much time as possible for working group discussion during the three days. In reflection perhaps all conference members would accept that the four and half hours allowed for small group discussion and decision making was not sufficient. Some comments of conference members are included below which bear out this latter point.

- The groups tasks were daunting in terms of task, the lack of information and the inadequate time available but the group performed creditably well.
- We were asked to do to much in too short a time.
- Insufficient time to debate issues. Would have liked more time to define what was urgent, what was essential and what was necessary.
- I feel that such important issues are possibly too rushed and there is not enough deliberation.

However, in spite of the time problem all the groups went a long way towards achieving their objectives.

It is interesting to reflect upon the planning process for the conference after reading the above comments and remembering other oral comments of a similar nature made towards the end of the conference. Originally some extra time in the evening was going to be given to working groups but it was felt that this might have been rather unpopular. Perhaps some of the papers should have been omitted. However, it was felt that relevant input was necessary.

The main objective of the working groups and the plenary sessions was to articulate a number of research areas which appeared to be important relating to rural education and arrange these areas in some priority order. The groups were also asked to consider the thread running through all the deliberations. This was the overriding problem - was the broad area which was the concern of the conference rural education or education in rural areas or something in between?

To supplement the experience and knowledge of all conference members, additional material in the form of a `State of the Art' document giving an overall perspective of research in rural education in Australia since 1945 was forwarded to conference members beforehand. The abstract from this document is included below.

> This paper represents a collation of research findings related to rural education abstracted from a literature survey approximately covering the 1945-1990 period. These findings have been categorised under a number of themes. Each theme is finalised by a summary (in black type) and the summaries drawn together in an analytical conclusion at the end of the paper. Future research directions are suggested.
>
> It is recognised that the title `State of the Art' is somewhat presumptuous, but it serves the purpose of indicating what the paper is attempting to do. There are, in retrospect, some limitations to the paper which readers will become aware of.

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1. One or two of the themes could well have been subdivided.

2. There are areas which receive only scant attention "women and girls" and "rural aboriginals". The reason for is that they did not emerge from literature reviews probably because of narrow indicators being used.

Other limitations will no doubt be perceived. These will emerge during the proceedings of the "Think Tank".

Three of the themes - schooling, technology and educational delivery were selected as focal points for the discussion of the first two meetings of the working groups and two other themes were added. The first of these related to rural communities which, after the report was written, seemed to justify particular attention. Another entitled 'special needs' covered areas related to groups within the rural community such as aboriginals and women had not received adequate attention in the 'State of the Art' document. These areas (interest groups) as indicated above became the focus for the first two meetings of the working groups. The groups were asked to make unlimited recommendations emerging from these themes with appropriate justifications. The first plenary session permitted the chairman of these groups to present the results of their deliberations to the conference as a whole.

The groups were then mixed (mixed groups) under the same chairman, for the second two meetings. The task of the second groups was probably more difficult. All the recommendations of the interest groups had been collated and the task of the first meeting of the mixed groups was to arrange these recommendations under the headings of urgent, essential and necessary. Whilst it was agreed that all the recommendations would appear in the final report, those labelled urgent were regarded as the highest priority. The recommendations in their three categories from all groups were collated again and made available to the final meetings of the mixed groups where they were given ratings of one to five - one being low and five being high. Final decisions relating to the ratings where made at a plenary session. It was agreed that these recommendations receiving ratings of five and four would be regarded by the 'Think Tank' members as the immediate priority areas for future research.

In order that there would be some opportunity for members of the conference to re-think both the wording of the recommendations and the numerical emphasis given to the recommendations two further plenary sessions were held. The first was a forum consisting of community members of the 'Think Tank' who had the opportunity of reflecting on the proceedings that had taken place and commenting on any serious omissions that had been made. The second session was concerned with examining the definition problems associated with rural education. A plenary session then took place when a final decision as to the recommendations was made. At the end of this session it was decided that it would be necessary to put the recommendations in the form of research questions. The chairmen of the various groups were invited to do this.

To assist the reader a diagrammatic representation of the group proceedings and the instructions to chairmen are in Appendix B.

The resolutions which emerged at the final plenary session are listed at the end of this section of the conference report and are followed by the modifications of these resolutions which came from the final plenary session. These, as indicated earlier, have been re-formulated into research questions which are also listed.

In order to give some sense of the process of deliberations that took place three reports from the interests groups and one report from the mixed groups follow.

INTEREST GROUP 2 - COMMUNITY

Philippa Hudson

This group was concerned with the pre-occupation with rural schooling as the main focus of rural education. However, broadening this concept to encompass a wider community framework for education proved problematic for group members.

Initially, time was spent responding to a rural industry member's challenge about research, its purpose, what has happened to other education `think tanks', conferences and government reports and reviews on education. "Where is the follow through and" and "where does the interfacing come together?" Such questions are the first to be asked by the general public about any research centres and work. This led to the inevitable conclusion that an initial primary task was to collate all existing research material and disseminate the information.

Turning to the focus of our group education within the rural community, consensus was reached that education should be open to all age groups and should be much wider than the traditional structured school, followed by an adult education system. A discussion about the inflexibility of the existing education system was stimulated by an example of a mature aged woman wishing to return to secondary school being forced to wear school uniform. How can the firmly entrenched bureaucratic rules and departmental boundaries be broken down? How can different service sectors be encouraged to co-operate and co-ordinate better? Our Scottish member was optimistic because this had already taken place within her country where community participants have decided upon a more cost effective use of government resources for a range of educational, recreational and social purposes. There are also some innovative examples of community schools in Tasmania and we had seen a video on one in South Australia. It was pointed out that back in 1984 in NSW there were proposals to combine TAFE senior secondary education in a college type environment in the provincial centres of western New South Wales. What happened to these initiatives and were some operating now? So models were available but they appeared to be few in number and little known. This led the group to formulate the first and second research priorities. (see attachment).

The next line of discussion was how do rural people perceive education and what part can they play in the process? A number of research suggestions flowed from this discussion. It was thought necessary to define what rural education means to the clients as well as to the providers. This would incorporate an analysis of rural values and beliefs about education and how this matched the reality. Changing patterns of family involvement in rural education was noted and it was felt these needed elaboration. The role of the principal came under scrutiny and examples of narrow and segmented administration of school rules and facilities was seen to be a major problem. It was suggested that if the education system placed strong recognition on progress made in incorporating the community into the school by widening the education options and age groups of participants, then principals would change their attitudes and methods.

Generally, rural community residents not only have little comprehension of what being "empowered" to have a say in rural education means but they also have had little opportunity to exercise the power of public participation in decision making. Discussions have remained largely within the control of central planners and administrators. Elaboration of the Scottish and other overseas examples of devolution of educational decisions would be a first step.

Again the question of rural/urban differences emerged (see 4). Some group members were not convinced by the aggregated statistics showing the closing of the gap between rural and urban

education. Staying at school longer may not necessarily have enhanced employment and career opportunities for rural people. A study following the career paths of selected rural students could provide some clues to the success of current rural education. Is there a peculiar rural factor influencing education which is distinct from socio-economic status, gender or ethnicity. Disparities within rural education delivery were considered in need of research attention. Empirical research reveals a perception that the quality of distance education is superior to that received in many small town and village schools. Many of these schools face serious problems arising from inexperienced teachers, complex cultural diversity where there are mixed aboriginal and non aboriginal populations, poor subject choices and a lack of appropriate teachers at secondary levels, extreme isolation and so forth. The outcome from these "second rate schools" must disadvantage the rural students whose parents are unable or unwilling to send their children to be educated in larger centres. What are the existing support systems, how well known are they and how adequate are they?

A major topic concerning the group was the relevance of education within specific rural areas to the employment opportunities in the surrounding area. Education has to not only provide the opportunity for career mobility for those who wished to move to other areas or other fields of study and employment, it also has to have a component which takes account of the less mobile groups, such as aboriginals, islanders and women.

Such questions linked into the last research topic suggested. What are the specific education requirements of the local rural industries and services and how can education be more closely linked to provide the needed skills to support the economic base of rural regions? Education is seen as a key to revitalising rural communities.

INTEREST GROUP 4 - TECHNOLOGY

Lorrie Maher

CLIMATE: Enthusiastic, concerned.

Initial thrusts:

Some members of the group had difficulty in conceptualizing the available technology and then designing possible research topics. The range of rural situations and remoteness, obviously encompasses a great diversity of possibilities to exploit the technology and enhance the delivery of education to rural Australia.

Discussion:

The group discussion focussed on concerns that multi-media courseware is very expensive, time-consuming to produce, and must be of high quality. While most people could cite examples of one-off programs, topics or even integrated units under development using an exciting array of equipment, it was indicated that in the areas of primary and secondary schooling this approach has not really encompassed the delivery of total and on-going sequential programs. The use of technology to produce and offer short training courses seemed to be within the current realms of possibility.

The in-service needs of teachers, students, parents and home tutors in the use of communications and computer related technology was certainly seen to be of urgent and paramount importance. In general, the discussions reflected a level of concern that while it is most important that projects be mounted to trial the feasibility and reliability of a range of equipment and delivery methods that we should also recognise that the existing print medium may continue to play a major role for quite some time.

Specific concerns:

The increasing trend of taking distance education models through to the end of the compulsory years of schooling, brings with it increased problems for home tutors and high tops. It was considered vital that the use of technology at the junior secondary level be given a priority.

Equipment maintenance needs to be addressed. Vocational training must be delivered to people at school, homestead and cluster locations from the outset of any projects and technology-use implementations as it is crucial that if greater emphasis is given to the incorporation of technology into courseware, it must be operational.

Recognition of enhanced presentation of specific curriculum thrusts and service models, e.g. health education for aboriginal groups, needs action and research attention.

Identification of Appropriate Research Topics

The deliberations of the working group which culminated in the initial list and classification of topics were in agreement on the major focus areas, viz. information needs and information delivery systems; viability of using communication technology on a wider scale and for specific groups; compatibility - national standards, including retrieval mechanisms of information; pedagogy, methodology and implementation; and feasibility and cost effectiveness.

General comments:

The importance of a vehicle to collate projects in progress at both State and National levels was emphasised. The pace of development in technology, and technology developed supported and related education, applicable at all levels and thrusts, through to the concept of life-long education, demands an urgency of action for quality research to support implementation and new directions.

While current technology offers exciting possibilities to reach and cater for the unique demographic population scatter, the diversity of local constraints may well present different equity issues rather than reduce or erase overall concerns. Care must be taken to improve equality of access and participation. Only a solid base of research will ensure positive future developments.

INTEREST GROUP 5 - SPECIAL NEEDS

Ian Crease

Climate:

The fact that group five was a composite of advocates for minority groups, realised strong but fair debate on the importance of one minority at the expense of the other. Realising division would not do the cause any good, there was a consensus to refer to them as "special needs". This resulted in the cohesion of the group.

Initial Thrusts:

Some members were able to articulate the peculiarity of need more precisely for one group which may not have been an issue for the other, and so it was decided not to dismiss any research topic because it applied to one minority only. This was evident in the number of research topics listed compared with other groups.

Discussion:

There was concern that minority groups should not be seen as a minority in number, although this was the case precisely for groups such as the intellectually handicapped. The two minorities seen as representing large numbers (women and aboriginals) reflected a number of concerns that members believed had their basis for consideration in social justice terms. Overall the members were educated in the sense that issues relevant to the advocates of each minority group were able to articulate the needs of that group to others which indicated a need for "raising the awareness" to the general public of each minority's plight. This was not in a sense unusual, and indicates that public awareness of the inequity suffered by minority groups should be an issue on a more public forum.

Specific Concerns:

One advocate of the concerns of women indicated the problem of making existing research more publicly accessible. Programs which had been undertaken and considered successful in some States and cities were not known to the general public, which highlighted the need to establish descriptors in a national sense to allow research material to be collated and centrally stored for national clearing.

There was also a realisation that research in a non-academic sense also had value, as did qualitative methodologies, in gathering that data.

General Discussion:

The restructuring of the second group exercises demonstrated the complexity involved in minority group advocacy in that issues listed as research agenda did not have as much meaning to the new members which demonstrated the idiosyncrasies of minority group needs, since the original "research topics" were not as well understood by the new members who had not chosen it as their first priority.

When minority groups are embedded into the context of a rural environment, the issues are made more complex and compounding. While some of the research agendas could well have

applied to urban people, the problems of rural minority advocacy frequently hinges on "service delivery" which appears to lie at the heart of providing services to many rural groups. The communication technologies appear to hold potential in resolving many of these research agendas, but should not be seen as the panacea, nor at the expense of personalising support for minority groups.

Conclusion:

The group process provided a good chance to raise issues in a cyclical fashion. It was a good exercise in raising research agendas, and having them debated and considered by a number of persons, other than those who had chosen that topic as their first priority.

MIXED GROUP 4

Jennifer Greaney

Group four of the mixed groups worked hard and conscientiously. The balance between task and process orientation being alternatively affected during our first meeting by a sense of group panic and the desire for consensus and consideration of the rights of other group members. The panic, or at least the strong sense of not having enough time for such a difficult and important task, having the slightest of edges.

Group leadership was subtle, strong and reassuring. Obviously skilled and experienced in group situations, Roy Lundin provided our group with a feeling of confidence which allowed us to keep the reins on the born of consciousness 'panic'. He also provided us with the basis for a structured approach for the daunting task of categorising the proposed research topics.

This approach combined elements of NGT, consensus decision making, democratic voting, the gentle art of persuasion, rational consistency and clarification of ideas. We were proud of our hybrid process which we believed contained the best elements of efficiency and democracy. Around the basic NGT process various group members suggested improvements to streamline the process.

To sum it up our process gave a numerical weighting which showed the group's tendency towards or away from urgency. Given the general group weighting individuals argued their case if they wished to influence other group members to change their original vote. Sometimes these arguments seemed to drag on and on and in these cases the group leader would call for a simple majority vote.

One of the first tasks we tackled was to attempt to define the categories of urgent, essential and necessary and to determine criteria for selection. We asked such questions as:

- what broad benefits are offered by undertaking immediate research on certain topics?
- what would be the consequences of not under-taking the various recommended topics?
- If we had $100,000 to spend where would our preferences go?
- which topics do we consider to be absolutely critical?
- Is it a unique area?

While true consensus on definition wasn't reached, there was a vague agreement and "narrowing down" of definition. The attempt to define our terms was described by one group member as "the agonising process of determining a strategy". With this vague, shared understanding we commenced work.

Our system at decision making proved to be rigorous and thorough. It took us 60 minutes to complete the first page of recommendations! While we did speed up considerably for the rest of the recommendations, we were, to our great vexation, still working long after the other groups were off gaily swimming, sipping cocktails and trying their hands at the casino. We wondered how have they managed it! What super processes have allowed them to finish on time? We discovered

next morning that it was simply a matter of not finishing their tasks! Smugly we, thereafter, referred to ourselves as the "advanced group".

Some of the issues which came up for us during that first meeting were:

- many of the recommendations were not properly formed research topics;
- there was considerable overlap across the five themes. We dealt with this by giving such related topics equal ranking;
- with themes some topics seemed to belong under the umbrella of other topics. In these instances we ranked the "umbrella" topic highest priority. While there was a tendency in our group to place greater value on the broad topics the point was made that there was a danger in over generalising and collapsing topics within others as this could result in loss of meaning.

Our second meeting was quite different. There was a sense of confidence in being in control of the task at hand. There was general agreement that the rigorous, thorough approach of our first meeting smoothed the way for the second one. We were very familiar with the topics and the rationale behind our decisions and this allowed us to complete the task calmly and efficiently.

In summary the group process was generally smooth and professional, with everyone exhibiting a sincere effort to address the problem of producing a research agenda. What is really needed now is another process which will result in these 'topics' being formulated in research questions.

PLENARY SESSION - DEFINING RURALITY

Dennis Griffith - Chairperson

This address outlines how our interest in defining rurality and isolation emerged and then provides some background to our current work in that area. Following this the session will be open for comments and questions.

Over the past few days delegates have talked about what rurality and isolation are. We have discussed the delivery of education and the role of technology. One issue which has emerged as a priority is that of equity or social justice. In his address last night Mr. Braddy, the Queensland Minister for Education, gave it considerable emphasis and for some time the Commonwealth Government has promoted its policy of addressing social justice issues with some vigour.

It is apparent that individuals have fixed and personalised definitions of urban, rural and isolation. There is, perhaps, some uncertainty among educators and researchers in the wisdom of developing a fixed definition of rural. It is, however, unfortunate that uniformity does not exist in the use of terms because it will be almost impossible to address issues of social justice while this uncertainty exists.

In the Northern Territory 32% of school children are Aborigines, while the State having the next highest proportion (4.2%) is Western Australia. Accordingly, the issues involved in Aboriginal education are of daily concern to my Department. Of course there are proportionally more Aborigines living in remote areas, and so the planning and revenue issues are brought into sharp focus and frequently the question of cost effectiveness is constantly raised with regard to the development and delivery of educational services.

Part of the difficulty in dealing with a definition of rurality is knowing where to start. Many of the current formulae used for allocating resources of specific programs, for example the Country Areas Program, do not do so on a basis of social justice. It is likely that a broader view, as well as an increase in resources, will be necessary to meet the existing needs of people in rural and isolated areas. The comparison of needs and funding by the Country Area Program in Victoria and Northern Territory illustrates the point.

Because of the problem of varying definitions of rurality and isolation, an effort to establish criteria has been undertaken. The first priority is to include a factor for geographical isolation because if it is removed from this "definitional matrix" the remainder has little meaning. Thus the objective of the research currently being undertaken is to provide a basis for comparison which will be applicable Australia-wide. It allows us to locate people spatially and describe distance from population centres of any given size. Initial mapping defined two approaches; one being 100 kilometres from a population centre of 10,000 and the other being 150 kilometres. Under the CAP formula weightings of one and two are applied respectively to those difference distance factors. The same technique was used to map those distances from 5,000 kilometre centres..

To cater for very remote locations, for example 650 kilometers from a 10,000 population centre, further consideration was required. Accordingly, the whole of Australia was mapped by Collectors Districts (CDs) (for while there are over 33,000), which enables the whole range of Census Data to be included, and used to analyse for example, occupation, income and provide a profile of the population in towns or distance bands.

With this refined approach, it is now possible to take a population band, for example, 150-300

kilometres away from any given population centre and generate a profile of whatever is required such as socio-economic status, educational achievement and so on. This then provides the basis for comparison of needs across Australia. Application of this system has provided one or two surprises, for example, in Tasmania there are proportionally more people living in population centres of less than 200 than in any other state or territory of Australia.

This type of analysis can be applied to a particular school and enables direct comparisons to be made with any other school in Australia on whatever dimensions or census variable required. The comparisons are objective and so provide an appropriate bases for making decisions on issues involving social justice. This objectivity is of particular importance when rural and isolated communities and schools are the subject of concern since they have very little weight in situations where political lobbying has an influence on decision making in relation to funding.

Application of this approach to programs such as CAP would provide a means of ensuring a more rational and defensible distribution of resources can be made based on objective criteria This will further the government's aims of equity and social justice.and demonstrate its concern to provide resources for the greatest areas of need. However, it is the responsibility of researchers and others in the field of rural education to demonstrate and promote the validity of this methodology. This is fundamental research, the application of which will benefit all who are committed to improving education in rural and isolated areas.

Other applications of the methodology are also apparent, for example, every major arterial road in Australia and every railway station have been mapped which provides very useful data on access to services. In Victoria, for example, 95.4% of the population lives within 5 kilometres of a major arterial road or railway station, compared with only 17% of the Northern Territory's population.

Clarification in the meaning of terms such as rural and urban will enable the problems of rural areas to be addressed in a consistent and objective way and will reduce the competitive scramble for funds. Anomalies should be avoided, for example, the CAP in the Mallee Track area has provided eight buses and three cars to serve the isolated people there, and overcome their isolation problems. In comparison, due to the limited resource allocation, the Barkly Tableland there is only one bus to service nine schools and before it is used for an excursion, the drivers have to travel a round trip in excess of 600 kilometres just to pick it up and return the bus to the Hub school.

Research, by finding appropriate and workable definitions of rural and isolated, will benefit those who need it most and ensure that funds are applied on the basis of needs.

Further development of the methodology will see the inclusion of airstrips and ports and their inclusion into the service delivery matrix. When in its final form the matrix and research findings it will be made available nationwide to all people and governments interested in rural education.

While geographic isolation is not the only form of isolation it is, in the Australian context, the priority issue. This is because distance imposes significant costs to every aspect of service delivery and support provision. Lack of support denudes rural and remote Australia of its population or at least inhibits increase. It is time that this issue is addressed "head-on" if the provision of educational services is crucial to the development of other remoter areas of Australia.

DISCUSSION

Question: - Would you comment on the relationship between size of centre and the services available? Services available in centres of roughly the same size vary considerably and it would be

nice to know what range of services one can expect to find in towns of certain size.

Answer: - One has to be cautious in looking for this relationship of services and population, however, education is the interest of this forum and there is a direct relationship between the type of school provided, subjects offered and the population. One important factor is the size of the catchment area for the schools; this is a real consideration in rural and isolated areas. For example, to run a High School in a small population area (say of 3,000 population) is very expensive in staff and equipment if a full range of secondary offerings are to be provided.

Comment: - When considering rurality, issues of time and space are critical. Geographic isolation is both a time and space dimension and so rurality is related to access to and/or availability of support service systems in terms of time and space. This includes education, communication, transportation, health, library services and so on.

Accordingly, it is necessary to define the acceptable limits in terms of time and space that we expect of people in order to get access to those services. For politicians this is easy because the lines are drawn according to the money available, which gives a short-term approach to the problems. As researchers, we should not fall into that trap.

Question: - One problem in defining rural education is that of curricula arising out of the community. Because every child has a right to an education and are, as adults, free to live wherever they choose, it is very important that there should be a common core of education. Great problems are caused for children if there are real differences between urban and rural education. Certainly there should be community involvement in education and curricula should be relevant to the community.

Perhaps some curriculum issues should be addressed at the national level and there should be greater cooperation between states, while at the same time keeping the system and curriculum as decentralised as possible in order to meet the needs of various communities.

Answer: - There are in the Northern Territory, a great number of homeland centres which are encouraged by the Commonwealth and demanded by some communities. It is necessary to look at what standard of education can be delivered over time. Education must be transportable and children from rural and isolated schools must be able to relocate to cities without an educational deficit. A specialised education that cannot be used outside a very limited area and will not give access to life opportunities anywhere else in Australia is not the kind of education most people would want for their children.

Question: - Perhaps this issue (transportability) is not as worrisome as is suggested. The best features of rural and urban education can be combined and it is possible to expose learners to ideas, concepts, processes of learning and ways of developing their own capacities that are firmly rooted in the local rural environment and yet still equip people for whatever walk of life they later enter - it is just a curriculum challenge that has to be met.

An issue related to this is the system whereby life opportunities are controlled by the one chance children have to get the right HSC score. This is a disastrous situation for many children and is a problem that should be confronted urgently.

In the 1960's and 70's children who did take rural education courses, e.g. woodwork, agriculture and technical drawing, were, in general, expected to enter the workforce in the local community. However, many did not, and case studies of their experiences and careers show that it was not difficult to move from that stream of employment to another. In the main this was achieved by undertaking correspondence courses, adult education and university. Perhaps the flexibility needed

should be sought at the upper end of the educational system.

Answer: - Most of the really worthwhile education initiatives in remote areas require considerable resources to achieve results that compare to the Australian mainstream level of education. Even if we specialise extra resources are essential. This is particularly evident in the Northern Territory remote areas where there is an effort to aboriginalise the education delivered to communities. The objective is to give the ownership of education to the community. However, this initiative requires significant resources for establishing specialised courses in training and staffing remote schools to release Aboriginal trainee teachers..

Question: - Consideration of curriculum does not address the issue of defining rurality and isolation. One difficulty in the process is that those who are researching and working on the problem have no direct experience of it, which leads to an over-generalised view of the issues. The somewhat mechanistic definition suggested may have the power to isolate those people whose circumstances are extreme and demand our urgent attention. Because of this the methodology deserves wholehearted support. Of course there are problems with it and some delegates may dislike an approach of this nature, but it seems to have the capacity to lead us to identifying real problems.

Answer: It is believed that the research approach we are using can identify real problem areas Australia wide. The benefits of using ABS data are irrefutable and the methodology will be relatively stable over time because very few Collectors Districts change from one census to the next. This will allow these changes to be incorporated without difficulty.

FORUM - REFLECTIONS UPON RECOMMENDATIONS OF WORKING GROUPS

Panel Members

Pearl Logan	- Chairperson
Fred Danielsen	- Association of Independent Schools
Lorna Hawkey	- Country Education Project, Victoria
Susan Stevenson	- President, Society for the Provision of
	- Education in Rural Australia, Tasmania.
Jenny Delroy	- Dept. of Primary Industries and Energy, Canberra
Clair O'Brien	- Isolated Children's Parents' Association, Qld.

You will see that we had decided to have a specific paper on the community. We thought that it was very important to invite community people to this conference from all States if at all possible. I also personally felt that boarding schools are very important and up until now there has been very little feed back from them. We will try in this forum to assess what the consumers feel about the direction this conference has taken; whether they feel it has addressed the issues that they are concerned about and came here concerned about; whether there are any negatives or whether we have not touched on some areas at all. I am going to ask each of the members of the forum to state very briefly their perceptions of the last two and a half days.

Fred Danielsen

Various concerns have been referred to in this conference but I am disappointed that one has not been mentioned at all. Education in urban areas for isolated people. I really think that this concern should be noted. We have not really addressed it. There are very good reasons why many people, especially very isolated people, cannot go to local schools and they have to go and board somewhere. This could be because of their isolation or perhaps because the local school does not meet their needs, for example a person in Cloncurry who wants to study Japanese or some other subject not in the curriculum of the local school. These children must go to these boarding schools. They do so at enormous personal expense to the family and I think that we should look at that very carefully. It is really a case now that we have been talking about taking the mountain to Mohammed. I think we should be looking at taking Mohammed to the mountain as well.

Lorna Hawkey

I am from Victoria and I am in the National Country Areas Program in Victoria which is the Country Education Project. It is true that Victoria does not have the same problems as the Northern Territory or Queensland related to isolation issues but I would not like to be the one to have to tell the people I work with that communities are of no account. We work from a community base and work on community structures. One of the issues that has been brought up here has been the recognition of community response to their own needs Action research is one way of responding to these needs. I wouldn't like to think that was devalued in any way because some very valuable work has been undertaken by communities whereby they have actually identified their own needs and are working towards responding to them. I think that this approach is very important. We must always remember that it is the people that are important. Whatever we decide, if it is not supported by the parents and children in those communities, doesn't happen. We work very strongly from a process of partnership and I think that is also something to be remembered. Don't devalue the work the communities are already doing.

Susan Stevenson

I am from SPERA and our main goal is to advance educational opportunities for people in rural Australia. Therefore we think the conference is on the right track. We are about the sharing of information and we support the broad aims of the conference. However we do have some concerns. We think that there has probably been too much emphasis on schools as opposed to the whole range of education. We are concerned about the definition of rural. I think most of our membership is more concerned about non-metropolitan as opposed to isolation. Whether that is a good thing I don't know. There has been no mention of adult education for instance and that should have been covered. Bypassing of schools - we think that resources should, in fact, be put into country areas to keep people in the country. What are we going to do with everyone when they leave year 12 if we persist in keeping people in school until that time? But it has been a good conference. One personal plea from me is that education is about people, I know we have to classify people into groups but I really think that we have gone over the top when we talk about non-electrics.

Pearl Logan

Well I am not sure what non-electrics actually meant but I think it means whether you have got 240 power that runs all the time or whether you have to go and start the engine. If the men are not there you can't do it. I know it's a flick of the wrist they tell you, but sometimes your wrist doesn't flick quite like the others. They always break down when the men are in the back paddock or they are in a mustering camp. So if that is what non-electric means I think it is pretty relevant.

Jenny Delroy

I am from the Department of Primary Industries and Energy and my Minister is John Kerin and while we do not have direct responsibility for education and training we do have a real interest in rural education. John Kerin himself is quite committed to the concept of equity and access to education for rural people and he realises the need to improve the quality of education in rural areas and by intervening with the appropriate Ministers in the education portfolio he can raise the profile of issues and make sure that they do receive the consideration that they deserve. Certainly conferences like this are invaluable in that they do point out the areas that need attention and we are attempting to identify gaps and impediments so that matters of equity and access can be addressed and, where appropriate, programs introduced or modified.

Clair O'Brien

I would like to thank the Centre for allowing a lay person like myself to come along to such a meeting as this and be part of it. We feel that we are the client group and I was quite intimidated about coming along to a group of researchers or professional people. We feel it is alright to bring researchers and people to meetings like this and go away and write more recommendations. However we are the ones that have to put ideas into practice.

The workshop sessions have been so good. There has been so much material and ideas. I found that the first two sessions were absolutely marvellous and was very happy with what was fed into them. Then we had to prioritise. This has been done and I hope that because the client group was in a minority our ideas would not get watered down too much. I was just wondering whether it is appropriate to feel that there would be more consultation now, before any hard guidelines are set to govern the next step. I just wonder if we should have further consultation with our grass roots members. Then of course there is the question of funding I just hope that so many of these ideas can get off the ground.

Pearl Logan

Now the idea I think of this session is exactly what Clair was saying. It is concerned with the consumer point of view. We have some representatives up here but there are people not represented as we couldn't bring all up to our panel. We want positive criticism. We want you now to ask questions of our panel, to make statements if you wish them to be made, to direct them either to one or all, and to highlight any area that hasn't been covered. I will leave it in your hands. Have we got any speakers.

Statement from the Floor

Jennifer Greaney

Well I would like to support Susan for what she said about the emphasis that has been made throughout the conference on schooling for compulsory level education. I am wondering whether the Rural Education Research and Development Centre feels itself that it has that emphasis and whether or not they see that that is their main area of work. I would be concerned if that was the case because I think that when we are talking about education in rural areas we should be looking at post compulsory, post secondary education as well.

Statement from the Floor

Jack Walton

In the last day or two that there has possibly been a school emphasis However the Centre is as much concerned with adults as school students. Our research and development work in Mt. Isa exemplifies this. We are attempting to improve access to tertiary education of both school students and adults.

Statement from the Floor

Jack McFaul

This is a bit limited because it is personal. When I started and became part of a school community what I wanted for my five kids for their education in a rural area was that they would end up with an education that equipped them to either stay where they were or to move on. I saw the faults that have been identified so often. It seemed, for example, unfair to send teachers out without training. The urgent issues still remain the same. A large part of the problem is not just in the provision of education but in the utilisation of it. It is not in the class room it is in the community. Where I live the fifteen, sixteen year old girls have got a real problem because there aren't enough opportunities for them locally, and because they are young girls, it is very difficult for their families to let them move somewhere else. The students who want to complete year twelve and then move away from home for whatever reason face an uphill battle. There is the problem of costs and just coping with a new environment. Costs come back to geographical allowances to be added to Austudy and family support.

Coming to the conference, I was surprised at how much interest it generated amongst the people who were not going to come. Sitting on the plane from home to Sydney my companion was an ex-principal of PLC in Sydney and she told me how boarding schools can provide an excellent schooling but that boarding school life is a pretty hopeless preparation for real life. From Sydney to Brisbane I listened to a grandmother from Julia Creek talking about the education of her children and the changes and improvements that she saw for her grandchildren - what a battle it was and how good she thought the providers were under the circumstances. From Brisbane to

Townsville, two people sat next to me. One was an ex-science teacher who had become disillusioned and had become a scientist and the other was an angry mother who had been disappointed with the service and the treatment that she had received. She seemed to have a lot of intelligence and no useful outlet for it. She took Steve's background paper and got out her nitpicker and she went through every page picking out the nits. Not enough on adult education she said, not enough on TAFE no regional perspective and then she fired at me in an angry voice the questions which I guess we have all been asking ourselves. "Why did they invite you? Is this conference a con job for the Centre up there to get some extra funding and make use of you? What is going to be the result?" I said:

> *When we finish up we are going to use this background paper to find what we have and what we need to add to it. We are going to have better co-operation and collaboration between researchers from opposite sides of Australia, we are going to have a journal which will help them exchange information and we are going to have an opportunity to use our combined strengths to get some extra funding of some sort from the tax payer". And she said "if you do all that you will be a bunch of bloody wonders.*

Pearl Logan

I believe that when you are in a home where you can't afford an extra room for your governess and there is no school within fifty miles you have to educate your own children. I had correspondence lessons, my children and my grandchildren had correspondence lessons. They have all gone to boarding school. I loved boarding school and all our kids loved boarding school. They hate going back but once they are back they say they have all their mates, they have their peer groups, they have their music they have sport. I think communication is the name of the game, to find out all the wonderful jobs which have been done everywhere. People die, they move on, things close down and as I have said and Steve has said we re-invent the wheel. This can be a great waste of time. This conference hopefully is not concerned with reinvention but is moving forward in a more innovative way.

Statement from the Floor

June Mary Mott

Well I am a grandmother, not from Julia Creek but from Richmond, and I had five children who went through the correspondence system, then into the boarding school system, then into tertiary. I would like to ask Mr. Danielsen for his comments on what are the problems in getting the isolated kids into the boarding school system or into urban education.

Fred Danielsen

We have been joined by my friend Wally Richards from Charters Towers too, who I know agrees with what I am going to say. We have an immense problem in getting isolated children into boarding schools purely for financial reasons. Only the other week I was in Julia Creek speaking to a mother who wants her year ten daughter to go to a boarding school to complete year eleven and twelve because the local school finishes at year ten. She has to send the girl away to board. The girl, from what I could gather in interviewing her, is capable of handling a tertiary course. The real problem is that the parent is not going to be able afford to send her daughter away to a secondary school to complete her education. That really worries me, because it is just not fair. I would like to see some research from this group investigating these problems. I would hope that the results show quite clearly that there are a lot of people out there who have to send their kids away to board and they face enormous expenses. Once they get to schools like ours and Blackheath

Thornburgh they can have all the kinds of experience that their parents would like them to have. music, sport, socialization and all that kind of thing. The major problem is access.

Statement from the Floor

Doug Lloyd

How do you see that partnership or the shared operation that has been described taking place?

You are each asking in slightly different ways for recognition of the roles that communities play and the informal agencies play but how do you see yourselves or how would you like to work together with the researchers to realise some of the things these research topics are identifying. For example it has come through clearly, and I am very pleased to see it has come through clearly, that there should be a needs analysis for example. Communities should be asked what they see their needs as being. How do you see yourselves working with researchers on a range of issues that will be investigated in order to keep that partnership going.

Clair O'Brien

I am having difficulty answering that question. We don't know, because we are not professionals, how to interact probably with the research groups. I don't know where we fit in. Will you show us when you get that end result and then come back to us and say now you have to put this into practice, will it work?

Statement from the Floor

David McSwan

I was involved in a project with the Board of Teacher Registration looking at issues relating to schools, communities and teachers. It was important that a committee be formed to be representative of community interests as well as those of the research. It was that committee that, in fact, staged approved and quite heavily in some respects, directed the way in which the research went. It was the co-operative collaborative approach that was taken. I believe it was a much better project because of the mix of the representative steering committee. We all learnt from that project. There were members of the ICPA on that committee, there were members of private secondary schools, principals of primary schools both from rural and urban areas as well as from the funding authority. This latter was important because somebody was watching how much money was being spent along the way. Because the committee was such a representative and involved body I think there was a greater perceived research credibility.

Lorna Hawkey

I would agree with that approach . We do have a similar method in our country education projects. Many of our issues are identified from the local area committees which have a half school half community membership. The issues are worked through and we often employ somebody to research whatever the particular field is the concern of the group. The researchers report back to the committee. This system works very well and the people involved have a sense of ownership. We have researched just currently the accommodation issue. The great problem to country parents was how to accommodate their children in the city. We had this issue researched. Now we are going back to the community group in question with recommendations. They can't articulate quite often what they want to say but if they have someone else there helping them to document it on the way it works well.

Statement from the Floor

Marie Dale

My first concern has been that I have seen the conference focusing more on isolated situations rather than rural. This is a concern to me because I feel that we are all rural. I realise that there are differences but I believe that the rural belt, which in New South Wales west of the Great Divide, extends for about 170 miles is an equally productive rural area in terms of the gross national product as the isolated grazing areas. The wheat belt of New South Wales is just as important as the sheep belt. My concern is that is if the Centre doesn't attract a great deal of money, and I hope it does, it may turn out a little more like the Western Australian Centre which I saw focus more on Western Australia issues than on national issues. If that is the case I can see that you end up focusing on issues that are Queensland issues. Certainly isolation is a problem here. I do believe I can see why you focus more on the small schools and problems of isolation.

My second point is that I am concerned about the by-passing issue. I refer only to New South Wales because that is the State I know best. I do believe there are children who by-pass schools,when they are only 25 miles away from a local school. I feel we don't know enough about the reasons for by-passing. Is it just for the sake of leaving the local community? One of the things that has been happening in the western region, is the transmission of programs via technology to other schools I think you can see that there will be less reason to by-pass if those sorts of practices are put in place in schools in rural areas because kids will be able to get the kind of subjects they want. I was talking to Jack Walton before I came here. He suggested that we should be looking at Monday to Friday boarding facilities in rural areas where kids can go home at weekends rather than leave rural areas for long periods of time when they are based in urban boarding schools.

Pearl Logan

What we want to do is promote ideas and research and try to talk to these people from Canberra. We need to know about research projects wherever they may be in Australia by feedback accounts of the projects through one central point in one central newsletter. All the Centre is about really is tying things together and with the appropriate technology we hope to develop a data library where all will have access irrespective of which State they come from.

Statement from the Floor

Frank Crowther

I missed yesterday's deliberations and I must say that having left whenever it was on Monday afternoon and arrived back this morning I was absolutely amazed at what I thought was the tremendous amount of progress that had taken place. I really believe what has been accomplished is quite admirable, and I would just like to say that as a researcher the conference to this point has certainly done a number of things for me which I really needed. I believe that, probably more clearly than I have previously discerned, there has been a value placed just on the nature of rurality even if we can't define it. It seems to me that what has come through in this discussion is the absolute importance of that concept to the Australian heritage particularly at a time when our country is suffering economically. It seems to me absolutely essential that we give real merit to that concept because of what it has done during the previous 200 years of our history for us. I think we have gone a long way towards identifying real issues in rural education and also problems for research.

The remaining thing for me personally is that as a researcher in this area I think there is one additional requirement which perhaps this conference can address, and hopefully the Centre can

address. This is, that quality research requires total co-operation not only from within the research community but particularly from governments and also from organisations like ICPA. For us to do what we want to do we have to have access to data which very often State and Federal departments may be reluctant as individual civil servants, for example, to provide us. If the Centre, through a conference of this type, can provide a focus for what we are doing I believe it will make it possible for us to do things which we haven't been able to do before.

Jenny Delroy

It is probably a bit dated now. Firstly I would like to say that I have heard several people say because they are not professionals they feel that they are not in a position to contribute as concretely as they could with the authority of a professional. Certainly it is their experience which is what makes them invaluable in this sort of exercise and they should not really underestimate their contribution. Secondly, I would like to say that for governments to make decisions they need information, and that information is required in a statistical, in a pragmatic, in a sensible form that is well defined. If you want funding and if you want policies changed then that is the way to go about it. Give evidence of need not warm motherhood statements backed by anecdotal evidence. If you can get statistical backing then certainly it is much easier for bureaucrats in Canberra to make a case in a tight economic climate that there is a genuine need and that this number of people are affected or that many people by implications are going to be affected.

Pearl Logan

Thanks to the panel. There has been in particular a focus on the need to co-operate. There is clear recognition in the research priorities that have been identified of the importance of working with communities. I think Jenny identified the need for us to look at any proposals for funding and make sure that they are clear and are directed at identifiable need. Frank has touched upon the importance of receiving access to data, and Lorna referred and the value of co-operation in research between researchers and community members. So for the contributions that you have made folks and for bringing us back to those perhaps forgotten areas like adult education and the boarding schools, thank you.

I should like to thank all members of the panel and those people who have contributed from the floor. This has been a very useful session because of the opportunity it has given particularly to people other than researchers to emphasise concerns which may not have been given sufficient attention in the working groups or may have been overlooked completely. In particular emphasis has been placed upon:

- the need to give greater access to those parents who for reasons of isolation or lack of appropriate educational facilities send their children to boarding schools;
- the importance of involving the community in decisions relating to research and development associated with education;
- the importance of information showing access to the country and integrating research endeavours;
- the importance of not confining research and development to compulsory schooling, but extending our concerns to post compulsory education;
- the importance of access and equity (lack of employment opportunities for girls in rural areas particularly mentioned);

- the importance of attracting funding to support research and development in rural areas;

- the nature of the future role of the Rural Education Research & Development Centre; possibly providing a focus for research in rural education;

- the need to distinguish between the needs of different types of rural areas - the more isolated (grazing, fishing, mining) and those more concerned with agriculture; and

- the problem posed by 'by-passing' schools particularly in agricultural areas and so perhaps causing a further future drain of prospective adults from rural areas.

PLENARY SESSION - FUTURE RESEARCH DIRECTIONS

David McSwan - Chairperson

This session has been made a little easier because of the progress we have made to date. That is due in no small measure to the way in which the working groups have approached their tasks.. So this afternoon we will review the documents that we were dealing with before lunch, adding further comment, and making any modification to the wording to make them more inclusive or more specific as may be seen to be necessary. As we all know we can write something meaning one thing, and it is given to someone else, and an entirely different meaning is attributed to it. So it is in our interests as a community of concerned people, to see that we are agreed about the meanings we want these statements of research directions to have. We've also got to consider whether the priorities that seem to have emerged are acceptable. (The full details of the succeeding discussion are not given, just the alterations that were suggested. The original wording of the item will be given, followed by the modified wording. Where a joining of items have been suggested, the two items to be joined will be listed.)

1. It was agreed that the item 1.1, "evaluate pre-service and induction programs for teachers in rural and isolated areas" be linked with the item 5.5 - "the pre-service and in-service training of teachers to support special needs groups".

2. Item 1.5a "identify support and in-service requirements for home tutors using new technology" was modified to include "small schools". The new reading was "identify support and in-service requirements for teachers in small schools and home tutors using new technology".

3. It was suggested that item 1.5b be introduced by the words "investigate the". The item would then read "investigate the effects on students and families of extended home schooling due to changes in modern technology and economic change".

4. "The community" was added to the opening statement of item 2.3. Instead of reading "research into existing expectations of rural education" it was modified to read "research into existing community expectations of rural education". Also "non-compulsory education in rural areas" was added to the list of factors and be considered associated with this item.

5. Whilst a change was not suggested relating to item 3(b)(ii), it was pointed out that definitions of rurality and isolation, should be quantified following the approach of Dennis Griffith rather than subjective.

6. In item 3(a)(i) "experiential" should replace "experimental". The item would then read "methods to foster autonomous/ independent/experiential learning".

7. A concern was expressed about the wording of item 3(e)(i) - "what are the attitudes and expectations of educational outcomes by all rural groups: quality, quantity, resourcing, strengths." It was felt that the wording appeared to lose something of the intention of the working group concerned. It was stated "there are a number of aspects which are buried

In that topic. Some of these could be lost if you use that wording versus the original one". The Chairman indicated that that matter would be looked into.

8. There was a feeling that 2.6 "collation of existing rural research generally and dissemination of ideas, information, policy guidance" should be linked to 5.10 "identify the gaps in research and ways to promulgate the results of existing research associated with rural special needs group". It was stated that neither of these had been given a high urgency rating.

9. It was suggested that 5.11 and 5.12 should be bracketed together, because of the commonality of thrust of each item.

10. Item 5.8 was modified. The original item read "Longitudinal Efficacy of special programs". The modification reads "Longitudinal study which would focus upon the efficacy of special programs"

11. The original item was changed from "Evaluation of existing supports for residential dwelling" to "Evaluation of existing need for and support of residential schooling". It was felt that 1.6 needed upgrading in the urgency category.

12. There was a concern that two much attention was being given to compulsory education at the expense of non-compulsory or adult education. To overcome that omission a further sub-item was added to 2.3 - "post compulsory education in rural areas". As indicated by one of the speeches.

The Commonwealth Government has taken a considerable interest in post-compulsory education and training. If you are talking about the reality of funding that is what the Commonwealth Government is into for the next couple of years.

Three particular concerns were highlighted during this plenary session.

1 [Begin Footnote] —

[1] It seems that the 'instrumentalists' hold sway with Governments of all political persuasions in all States. There is therefore a political reality which needs to be acknowledged. Instrumentalists seek to place more emphasis on measurable outcomes. While it is essential to strive to convince these people that there are highly desirable outcomes in schooling which defy measurement, we need to pay more attention to these outcomes which can be measured. It is suggested that we need longitudinal studies to determine the effectiveness of programs that attract special funding arrangements, particularly in these projects which have aims which are long term.

— [End Footnote]

RESIDENTIAL/BOARDING SCHOOLS

Discussions relating to residential/boarding schools in the plenary session indicated concern for this area. The comment below by Sister Miriam McShane probably encapsulates the main points.

I think we may have to look at funding again because since the most recent study (Tomlinson and Tannock 1981) boarding school costs have risen considerably. One of the problems now is with the funding of Austudy. We really do not know who has been affected by it - for example the number of people who are now no longer able to send their children to boarding school. The other associated cost is for the boarding school authorities themselves in terms of wage costs for supervisors and meeting the restructuring of teachers' Awards. If the government does not pick up the extra cost boarding schools will have to and this of course has implications for parents. It is a fairly significant issue. There is one other point relating to gender equity. In Queensland there are at least a thousand more places for boys in boarding schools than there are for girls. This does suggest that girls are being disadvantaged.

BY-PASSING PRACTICE IN NEW SOUTH WALES PROVINCIAL AREAS

This point was raised by Marie Dale. The point she made is as follows:

> Because of the economic climate at the moment certain elements of the budget in New South Wales are "blowing out". One is transport. In New South Wales it costs about $200,000,000 to transport children to schools. I agree we have to place greater emphasis on building up the schools in the more provincial rural areas to make "by-passing" less necessary. This, in some areas, could be done by closing down the secondary tops of certain central schools (New South Wales) and arrange for weekly boarding in nearby secondary schools which are too far away for daily travel but near enough for travelling home on a Friday and returning on a Monday.

POST-COMPULSORY EDUCATION

There was a feeling that the conference had limited itself a little too much to the compulsory years of schooling as far as rural education was concerned. Attention was drawn to the need to consider other groups in the community as well as students in the compulsory years. This concern was, hopefully, addressed in the amended resolution 2.3.

The complete list of recommendations modified as indicated above emerging from the five working groups follows this section. Their rating on a 1-5 scale is given in the left hand margin - 1 is low and 5 is high. Those items with rating of 4 or 5 were placed in the priority category and in the form of questions/topics are listed later in this report. The priority questions are listed separately at the end of Part III.

COMPLETE LIST OF RECOMMENDATIONS

WORKING GROUP 1 - SCHOOLING

TEACHERS

Ranking

2 1. Evaluate pre-service and in-service programs for teachers in rural and isolated areas with particular emphasis to the teaching of children with special needs.

3 2. Review and evaluate current policies and programs aimed at attracting and retaining teachers in rural and isolated areas.

3. Comparative study of recruitment, induction and retention in other agencies. e.g. police, banks, hospitals, business, mining companies, churches, public utilities etc.

STUDENTS

4 1. Factors impinging upon decision making of students and parents at critical decision making points (e.g. year 7, 10, 12).

1 2. Analysis of performance of rural students in tertiary institutions.

1 3. Identification of special needs of e.g. isolated high achievers, itinerant non-electrics, mobile/transient students.

1 4. Examination of the transition from correspondence/distance education/home schooling to formal schooling.

5a. Identify support and in-service requirements for teachers in
3 small rural schools and home tutors using new technology.

5b. Investigate the effect on students and families on extended home schooling due to changes in modern technology and economic change.

4 6. Evaluation of existing need for and support of residential schooling.

2 7. Exploration and evaluation of traditional and non-traditional

(I) methods of delivery
(II) structures of schooling

WORKING GROUP 2 - COMMUNITY

Ranking

4 1. An analysis of existing structures and processes that support the 'community school' concept (within Australia and overseas).

What are the mechanisms and strategies that are effective in developing community schools?

What are the appropriate guidelines for pilot projects in this area?

What support do communities need?

1 2. What are the roles of the school in the development of the community and how can the education sector co-ordinate with other community sectors such as welfare, health and law enforcement?

Cost effectiveness of existing structures and resources.

4 3. Research into existing community expectations of rural education.

- definitions of rural education
- beliefs and values about education among rural parents
- the role of the principal as perceived by the community and by the individual
- the role of the family within rural education
- patterns of involvement of rural people
- post compulsory education in rural areas

4 4. Investigate the relationship between education progress and the economic health of rural industries.

- trace the career paths of rural students (a rural factor, socio-economic etc).
- rural town/country differences in rural education and opportunities.
- special needs of educational systems dealing with Aboriginal and Islander populations
- awareness of existing support systems.

1 5. How can rural education be more closely linked to the needs of specific rural industries?

3 6(a) Collation of existing rural research generally and dissemination of ideas, information, policy guidance.

(b) Identify the gaps in research and ways to promulgate the results of existing research associated with rural groups with special needs.

WORKING GROUP 3 - EDUCATION DELIVERY

Ranking

CURRICULUM

2 1. Methods to foster autonomous/independent/ experiential learning.

4 2. Is there an appropriate non-urban curriculum different from national (urban) curriculum?

EDUCATION MODELS

3 1. Recognition, support and implementation of local action research (i.e. informal programs).

1 2. Effect of different definitions of rural, isolated.

SERVICE DELIVERY:

1 1. Education needs of rural industries?

1 2. Educational consequences of itinerancy?

DECENTRALISATION:

4 1. Educational implications of centralising and decentralising educational delivery.

EQUAL OPPORTUNITY

4 1. What are the attitudes and expectations of educational outcomes of all rural groups in terms of quality, quantity, resourcing and educational strengths.

WORKING GROUP 4 - TECHNOLOGY

Ranking

2 Information needs and information delivery system -

(a) Define the information needs of rural personnel e.g. adult education, business management, child education, entertainment, communication etc.

(b) Design and develop a coordinated delivery system for such information.

1 Viability of using communication technology on a wider scale and for specific groups

- Viability of using communication on a wider scale - especially regarding differential needs/ formulae for rural-urban communities.
- Feasibility of technology use for total delivery of distance education education courses - both further education for the educated and basic entry education.
- Applicability of certain technology for particular audiences - e.g. rural and remote communities.
- Use of technology for health education in isolated aboriginal communities.
- Ways of providing, via the technology, delivery of specialist curriculum areas, e.g. language and science.
- Use of communication technologies for education of itinerant populations, e.g. seasonal workers, railway, mining and aboriginal groups, defence.
- Literacy and numeracy programs - design and delivery - for adult aboriginal populations.

3 Compatibility -

- Compatibility and standards across systems and States.
- Investigate a national standard for access and retrieval of information stored on remote databases; gateway possibilities; cd rom technology.

4. Pedagogy, Methodology and Implementation -

- Educational outcomes and impacts from using communication technologies - e.g. compared to face-to-face, correspondence, etc.
- Multi-media remote education solution - who will prepare the program/courseware, maintenance of equipment, in-servicing of parents and students.
- Retraining models and methods in the use of technologies.
- Need for research to document the process of introducing technology to education and the issues relating to coordinating such a process across groups and institutions.
    - (a) Learning styles and the attributes of the technology
    - (b) User adoption of technology and the user friendliness of the systems
- Research into the design of programs that exploit technology and into instructional design, using interactive video disk and similar.

Feasibility and cost effectiveness -

- Optimum provision and cost effectiveness off communication services which will meet needs at an affordable cost.
- Investigate the tensions created on remote phone line use, reliability, and the costs related to on-line usage.
- Feasibility of technology use for total delivery of distance education courses - both further education for the educated and basic entry education.

WORKING GROUP 5 - SPECIAL NEEDS

Special groups within rural education that should be the focus of new research are:

- Aboriginal and Islander
- Women and girls
- Intellectually and physically handicapped
- Isolated children (those without daily access to school)
- NESB

- Itinerant workers' children
  - long term (police, teachers .....)
  - short term (fencers, fruit pickers....)
- Low SES

The following areas are suggested for research:

Ranking

2 1. Data gathering, where necessary, which relates to demographic information about specific groups within designated areas.

4 2. Destination studies, specifically secondary school leavers.

1 3. Study of the factors influencing career choices of rural school groups.

2 4. An examination of educational curricula in rural areas to determine their relevance to special groups.

2 5. The pre-service and in-service training of teachers to support special needs groups.

5 6. Relevance of the use of technology in rural areas to the learning styles of specific groups.

5 7. Destination study of Aboriginal and Islander teacher graduates.

1 8. Longitudinal efficacy of special programs.

1 9. The recreational opportunities available for rural youth.

4 10. The collection of data (qualitative and quantitative), and longitudinal studies relating to rural women's training and retraining needs.

4 11. Ways of increasing rural school leavers' participation in tertiary education.

PLENARY SESSION - CONSORTIUM AND JOURNAL

Jack Walton

This session is concerned with two items which were referred to in the initial letter of invitation - the suggestion that a consortium of people involved with the interests of concern to us be formed and the other suggestion that we should consider, if only in principle, the formation of a journal of research in rural education. We feel that we can only float the idea of a journal at this point. We are fortunate in that we will be helped in our thinking about a journal by Ron Store, the Senior Librarian at the University in charge of reader services, who, particularly from his recent experiences in developing a journal for the Centre of Tourism at the University, will be able to give us appropriate advice.

So during the next hour we will be considering first the consortium and then the journal. I should mention to you that irrespective of whether or not a journal is eventually published the Centre will be publishing a newsletter twice a year. The first newsletter should be ready for publication in two months' time. This will be circulated throughout Australia and certainly everybody who has attended this 'Think Tank' will receive a copy. Already we have received contributions from people in this hall.

I will now ask David McSwan to address you on the subject of the consortium.

David McSwan

Ladies and gentlemen my object is to share with you some of the preliminary thinking of myself and colleagues at the Centre about the consortium. A consortium to me implies an association or network of people with similar interests who interact share and provide for one another information, possibly relevant services and act together as a corporate body in pursuit of their interests. It seems to me that the threads that run together when thinking about the consortium are the two words "collaboration" and "co-operation".

The points that I am now going to make are merely suggestions to help us in our thinking about the consortium. Perhaps one of the first steps would be to collect data relating to the research and other interests of all those who wish to be associated with such a consortium. Obviously if a consortium were formed it would extend in membership beyond this group who have attended the 'think tank'. The data base as it develops should enable any person who has a particular interest in an area to be covered by the consortium to interrogate the data base for the particular information which he/she requires.

Another question that comes to mind when thinking about a consortium relates to its management. Obviously this has to be shared amongst the community who form the consortium. I think this is something that we should give thought to.

These are only one or two thoughts to initiate some discussion.

Jack Walton

I really feel that it is important that some decision is made today as to whether we wish to form a consortium. My feeling is that a consortium would be helpful to all of us in the pursuits of our particular interest relating to rural education. Proposals that we may make would have a greater power if backed by a defined organisation. If we do decide to form a consortium we will need

volunteers from people here to get it going. However as I think the issue of the consortium will be raised again by Dr. Baker and Dr. Meyenn I will not make any more comment.

Statement from the floor

Doug Lloyd

It seems important that if this conference is going to make recommendations, that they are seen to be endorsed by some sort of organisation such as a consortium. If such a consortium were formed it probably should have some sort of executive representative of all the States in Australia which will give it a national focus. A consortium would be important in so much as it brings together the groups who are already playing a significant role in research into education in rural areas. It would also give formal recognition to the associations of researchers and community members which we have identified over the past three days. I am therefore a strong advocate not only for a consortium but for an executive that reflects the views of such a consortium.

Statement from the Floor

Tom Johnson

We are probably looking at political timing. It seems important that the report of this conference is circulated to critical people throughout the country.

David McSwan

We faced this kind of situation on another occasion, and the practical solution emerged then that we made an effort to circulate immediately the recommendations from that conference without further elaboration. The full conference report was sent out at a later date.

Jack Walton

In this case the report is required by NBEET in about a month's time. Unlike David's conference there is therefore an urgency in getting the report completed as soon as possible.

Statement from the Floor

Roy Lundin

I should like to comment on the voluntary type of consortium mentioned by David. I think such a consortium would fall into two categories, both of which have financial implications. The first kind is where voluntary organisations buy into a consortium and thereby become shareholders and expect some return for investment. The second type is where the individuals or groups subscribe to an association. We have probably to decide which way we will go.

Jack Walton

I think we will have the opportunity of discussing the consortium later. However we must now move on and I have great pleasure in introducing to you Ron Store, Senior Librarian at the University who is going to explain to us the intricacies of starting a new journal. I am sure what Ron is going to say is going to be very important to us probably more in the future than now for no instant decision has got to be taken relating to such a journal.*

*Ron Store's paper will be made available to anyone who requires it at some later date.

REFLECTIONS ARISING FROM CONFERENCE

Bob Meyenn

We have decided not to present a summary because we felt that the process that was gone through today identified the priorities, and so it would be repetitious of us to try to indicate what we saw as the priorities. We felt that we should stand back and give something of an overview.

We have divided our comments into two sections therefore, one that we might generally call "The Context" - the context in which we are all operating that I will speak about, and the second "The Nature and the Purpose of Research" which Robert will speak about. We have prepared a couple of propositions to put to the meeting and we will do that at the end.

I think it is really important that we do not lose sight of the fact, which is very easy to do when we are beavering away in our own patch, that we are part of a much wider scene - a state, a national and indeed, an international perspective - and I think that has never been as true as is today in Australia. It is with reviews, and another review now that we have had of CAP, with 'Schooling in Rural Australia", with the current review that is being undertaken into rural education and training, very clearly on the political agenda. We have read in the paper since we have been here, that Bob Hawke is also going to campaign for the bush votes.

We are all aware that all three political parties, the major political parties, are placing a great deal of emphasis on services and provision in rural Australia, and that gives us, I think, a tremendous opportunity. We are working within that context, where perhaps for the first time, we are being listened to by governments and oppositions in each state and federally. So it is important that we take the chance that we have, and I think we have a tremendous chance at the moment to influence those political agendas and to get the needs and the issues to do with rural education firmly on the agenda of all parties.

I have identified a couple of other features that I see as general features of the scene at the moment. One I think that we really need to look at carefully, and it is happening in all states to greater or lesser degrees, is the feature of educational provision that is to do with decentralisation.

There are decentralisation programs, more advanced in Victoria, under way in New South Wales, proposed here in Queensland, decentralisation of the administration, and also of the delivery of educational services. That offers tremendous potential for us as rural communities to have more influence, more power and indeed more ownership of the educational services that are provided in rural communities.

We also must be aware of the potential dangers. I think particularly in the area of equity.

I could quote an example of one region in New South Wales which is decentralising along the lines proposed by the Scott Committee of Inquiry. As a result of this decentralisation of administration in one of the regions, all the senior positions, the top sixteen positions were all male - something that had never happened before. Eleven of the twelve are cluster directors and the other inspectors are from a primary background. They came through the primary education area. So with decentralisation, with local autonomy, with local control, there is the potential that important equity issues can be overlooked.

Education must be about wider concerns than just local issues. I think that is important and a point that I will come back to later. Devolved also in the delivery sense to clusters and to individual

schools, are the funds for in-service education and that is fine, but we have to be careful that it does not lead then to schools and clusters becoming very parochial and insular. Education is also about, crucially about, horizons and new knowledge and new challenges, and that is not always what we get as a result of completely local decisions. There must be a balance obviously, particularly in terms of the curriculum, and having more community control over the curriculum, will not necessarily solve our problems.

I would like if I could, just to be anecdotal for a couple of minutes, as part of the OECD project in education and local development in rural areas, I spent some time in Scandinavia, and there is one story that I would like to relate to you that I think illustrates one extreme, where - the country was Finland - a highly centralized education system, very, very tightly controlled curriculum - as we had when we did comparative education at teachers' college and used to be told similar stories about the control of education in France, where the Minister of Education could look at his watch or her watch, and know what was happening in every class in the country. So Finland was very tightly controlled. I was at a school way up on the border of Lapland, the Arctic Circle and the Soviet border, and on the way to school that morning, the teacher had come across, knocked down presumably during the night, an Arctic owl, an absolutely superb bird, quite rare. I had seen one in a museum the day before. Anyway he brought this along to school to show the kids and had it wrapped up in newspaper at the front of the classroom and started off the lesson that I was watching by saying to the kids - "guess what I found on the way to school this morning" - and then opening up the parcel and showing this Arctic owl. He had a great discussion on the Arctic owl and what they might do with it and how it could be preserved and so on. Then he wrapped it up again and said, "but today's social studies lesson is on bears" and went on to give a very good lesson, because he just did not have the authority, the confidence, or the right I guess as he saw it, to develop locally relevant curricula. It was so highly centralized.

Also as part of this project, I was a visiting professor at Dartmouth in the New England area of the States - that sort of area up on top of Boston - Dartmouth is on the New Hampshire/Vermont border - and I was staying with Faith Dunn at the time, and she took me along, because she was an elected member of the school board of the Hartland school where her children went, and we spent two hours that evening - or I didn't spend the time - I sat there and listened to them debate for two hours, what the fourth grade maths syllabus should be. But this was an elected community group determining, with the principal there, only as an advisor, not as a voting member of that committee. There was, I guess, the other - or in terms of my experience - the other extreme, the community with complete control over the curriculum.

I think that we have an opportunity now to really make things different. I mean we have had centralised education systems and we now have the potential to be far more involved in the educational decision-making - educational process - and we should seize that opportunity and make the most of it, but I guess I just want to say that there are difficulties and dangers in decentralisation.

I think also we have the tremendously exciting possibilities provided by the technological advances that we are going through and we must share our experiences in this regard. I mean throwing technology at the various issues will not necessarily solve them, and we have to share our experiences of how we are dealing with, how we are trialling, how we are coping with the amazing technological advance that we have before us.

I would like to spend just a minute on rural education, if you like - the myths and the realities - and we must get out of, and I think we are getting better at the sort of negative mind set that we have about rural education. We somehow over the years, have built up a deficit model regarding rural education. On the other hand though, we must not romanticise. I guess what I am asking for is a much more realistic appraisal - a much more realistic assessment of education in rural Australia. We must not forget. We must hang onto those tremendous strengths that being part of living in

rural Australia brings. It does have considerable positive advantages and I would argue advantages which are increasingly attractive to urban dwellers. Some of the best education that I see as I go around schools all over New South Wales and in other places, is what goes on in rural schools, and we must not sell ourselves short.

I will just be anecdotal again. My youngest child, David, is in sixth class at the little one-teacher school just around the corner, well three kilometres from where we live, and he rides his bike the three kilometres back and forth each day. Life for him and education for him is a total package. I mean it is a marvellous opportunity for that child to be part of that community. It still makes me go warm and fuzzy, to use the phrase that Mary did this morning, when I see him leaning over the back of the ute talking to an old farmer down the road about the floor price for wool or what breed of sheep his dad's going to buy. It really is a total education experience. He's part of that community, a genuine part of that community, and interacts with a whole range of people in that community.

When I left on Sunday to come here, Val and I called in to see him and his teenager brother, who with two mates were walking behind the potato digger. Tom, a local contractor who grows spuds in our area, was looking for some, to him I guess, cheap labour, but there were these four boys, David and John and their two mates, filling up bags with potatoes as the potato digger went on, and earning, so he tells me on the phone, subsequently, $23 the first day, and then because there was not any school on Monday, the holiday, $24 the second day. It is a tremendous opportunity, a tremendous lifestyle for that child and for all of us living in rural areas.

I have seen that experience repeated in so many other places. I saw it up in the same place in Finland, where there were three days off school, while the kids went with their families to collect berries - lingen berries, I think they were called - which were, because of the long periods of darkness there, a vital source of Vitamin C in their diet. So the kids, as part of that community activity, had three days' holiday from school to assist in the berry harvest. It was similar in the Vermont area of the U.S. while I was there. The kids after school - it was Easter time, and the sap was starting to run in the maple trees - all out with their little tins collecting the maple syrup.

There is something that is incredibly important, incredibly valuable, about being part of a rural community, being a child in a rural community, growing up in a rural community, that we must not romanticise, but we must not just neglect and throw out in any pressure to completely urbanise our education.

The issue of rural education versus education in rural areas, I think if we are not careful, can sidetrack us. There have been discussions and debates for the last twenty years that I have been involved in rural education, over locally relevant curricula. It is a long tedious debate and we can get sidetracked by it.

Don Squires made the point this morning that, and I guess what I'm saying is the same in a different way, any good teacher will provide appropriate learning experiences for the children, the adults, whoever is in their charge, based on the experiences, based on where that child or that adult or that person is at, and starting from that point. We need teachers in rural areas who are more sensitive to rural life, who have some understanding of those experiences so they can build on them and develop an education that is equally appropriate, wherever they happen to be.

This obviously affects issues of teacher education. I would like to underline that point that somebody made yesterday I think it was, that we should not keep talking about the training of teachers. It is the education of teachers that is important for us and important if we are going to achieve some of these aspects that we desire.

As I said earlier, the issue of equity is crucial and the points that Lindsay Connors made on the first day, I think, were worth listening to carefully. Education is about chances and about second chances and about opportunities to make choices. This may well cost more for some people and we must not recoil from that. Simply dividing the educational budget by the number of people who have to be provided for, does not guarantee equity at all. In fact it may perpetuate any inequality. The cost of providing an appropriate education for a child at Wilcannia or a man and woman at Wee Waa will be far greater than the cost of providing similar education experiences for a person in St. Ives or Vaucluse in Sydney. I think we should keep saying that. It might not be politically fashionable, but it is true. If the basis of the education, or one of the constructs of the education system is to provide these opportunities for all people in Australia, then it is going to cost more to provide that opportunity for some than it will for others, and we should not be ashamed of that. That is a point that Jonathan Sher was making in the seventies, and I think we have to reinforce it.

The issue of, and the role of the school in the viability of rural communities, I think is important. The OECD project, that I guess most of you have read the reports of education and local development in rural areas, really did offer some interesting possibilities in the way in which a school can be in the kind of relationship that has been described, particularly from the group that was looking at the community, a very closely integrated relationship with their community. They do provide a tremendous resource for that community and are also resourced by that community. The schemes that I saw operating in a number of countries were in school-based enterprises and, I think, offer tremendously exciting possibilities, which seemed to provide potential for learning opportunities for kids that they would not have previously had, and a tremendous input in potential for the community.

Finally, one of the features that this conference has gone a long way in redressing, is that we too often work in isolation. We beaver away with our heads down, and work extraordinarily hard, very often in parallel with another person who is doing a very similar thing somewhere else, and I would like to suggest quite strongly to the meeting, and I have written it down on an overhead, that a consortium be established and have as a principal function, the collection and the dissemination of completed research reports, and work in progress on rural education and that this data bank should be regularly updated, and perhaps after Robert has spoken, we can discuss how that might be achieved.

REFLECTIONS ARISING FROM CONFERENCE

Robert Baker

Now I want to talk, necessarily fairly briefly from all points of view, about some aspects of the nature of research, following on from what Bob said, and leading up to two points which I will put on an overhead at the end and which really build from Bob's two points.

The first point is that we need to address the constituency, the participants, the audience for a proposed consortium, and secondly, in order to address that issue, we need to be fairly clear about the way in which we are actually using the term "research". I think it's quite important that we articulate, both for ourselves and for the people to whom we are going to try to communicate the outcomes of this conference, what we mean by research, because that in turn affects how we define and implement a consortium.

Now the word "research" has been a cornerstone concept of this "think tank", but I think in some important respects the way research and the assumptions about who researchers are, has remained a somewhat unexplored issue during the conference. There are three things that I want to point to in relation to that, because I think they highlight three dangers that we need to be aware of and to avoid.

The first is that there have been a number of comments that I have picked up usually implicitly, that indicate that some people see research as something that belongs to people in tertiary institutions. Now in a number of areas of education this is, and I think ought to be, an increasingly outmoded construction of research. It is the view of research that leads to the kind of characterisation that Mary gave the other day when she referred to the mystification of research, a view that sees research as essentially a technical act, and I think it is a view about which we need to affirm scepticism.

To illustrate, I think one of the most important and powerful papers that we heard at this conference, was Jeannie Herbert's. Now Jeannie began her talk with an explicit disclaimer that it was a research paper and Jeannie commented that it was essentially a piece of practical work, and she used the phrase "keeping feet on the ground". Now I am sure Jeannie did not mean it in the way that I am overdrawing it at the moment, but I think it is very unfortunate if we begin to separate out research from the kind of thing that Jeannie talked about from her data base and pretend, quite inaccurately, that somehow or other they are different, or one is more or less valuable than the other. I think we need to be very careful that we do not start drawing distinctions, or rather I think we need to blur distinctions between what have been characterised at times as researchers as against practitioners, because unless we blur those, we are introducing dichotomies and we are introducing exclusive domains and I would hope that that is something that a consortium sets out to avoid and reject.

The second point, the second issue in relation to the nature of research, I think came through Steve's State of the Art paper. It provided an illustration of a particular, but very much a partial view, of what constitutes research. A great deal of the research reviewed in Steve's paper is commendable and useful, but for the most part the kind of research in that paper is research from the outside looking in, and it runs very much counter to the important statement of page 38 of that same paper, which I'll quote: *"the locus of control for defining rural education programs should be returned to the community with outside agencies playing a facilitating role and not a dictating role. Also the criteria for deciding if a problem is in fact a problem, ought to be more firmly rooted in local conditions and not in a preconceived set of standards, uniformly applied, to all school systems,*

regardless of size and location". We need to recognise that important areas of research and approaches to research, are not included in Steve's paper, for example as was pointed out earlier this morning, a number of very valuable community based studies.

The third issue that I wanted to mention, and it partly flows out of that second one, is that I do not think we have been as explicit as we might have been, about the fact that there are personal and political uses for research. As people who are involved with education in rural areas, we are involved in a political environment, and research is not simply a vehicle for establishing knowledge. It does not have to be, and often cannot be, a neutral activity. We need to construe the value of research as much more than just adding to some notion of a central warehouse of knowledge, and I think we need to construe research in a consortium or whatever, as fundamental to understanding the situations and circumstances and influences affecting the lives and work of people in rural areas. To again use the jargon, research can empower people and the understandings and insights which research can provide, then become a basis for making a political difference, not using political difference of course in the party political sense, but rather in terms of understanding and influencing those decision-making processes which bear upon us, but which can appear remote and inaccessible. There is a cliche that knowledge is power. I think we really need to talk about understanding being power, and research, while it brings knowledge, becomes really the basis for action when it brings understanding, and the styles of research that we need to bring those kinds of things about, embody a lot of styles of research which are not embodied, for example, in the State of the Art paper.

I suppose summarising this point, if we want to be effective in communicating with decision makers, we need to recognise that research really does matter, and it is not just those forms of research that are reflected in, for example, the State of the Art paper. Now I've made those points, because they have a direct bearing on how we construe the kind of consortium which is being proposed, and they have a direct bearing upon the nature and purposes of the kind of communication medium adopted, whether that be a journal or a newsletter or whatever.

We talk about, and have for a number of years now, the inclusive curriculum. So too, I think we need to talk about an inclusive approach to research, and an inclusive approach to research implies I think such things as recognition in the rural education area, of what has become fairly commonplace in other areas of educational research, namely practitioners as researchers. We need to emphasise case study research and action research, and it was encouraging to see that in group 3, the one concerned with delivery, that when groups were prioritized, that three groups rated as urgent, the area of recognition, support and implementation of local action research. We want to ensure that in a consortium that such things as the analyses of policy are central to what we construe as valid and important research concerns. If we are going to have a consortium that matters, we need the kind of analysis which Laurel Larocque provided when she gave us an understanding of contextual factors which influence the CAP review, for example. We need to encourage, not only multi-dsiciplinary approaches, but also multi-party and multi-interest group approaches to research, including other agencies such as health, welfare, law enforcement and so on.

All of that is by way of background to the overhead that I will show now, that attempts to take those strands and put them in two propositions.

First that the consortium define its constituency as diverse. In doing so the consortium explicitly recognises the stake and the role in research, of groups such as those concerned with policy and administration, community interest groups, parents, teachers, students, industry, rural service providers and so on.

Second that research in rural education be broad in its methodology and in its range of

questions, issues and practices, and that consequently a diverse range of research activities and topics is encompassed and encouraged. In turn this diversity should be reflected in the mandate and the ownership of the consortium and the materials which it produces.

I think that I see those as more than simply hollow sentiments. I think that they approach principles which say a lot about what a consortium can be and what a consortium can not be if it is going to be acceptable to the broad community that we represent, rather than to a particular sectional interest.

FINAL PLENARY SESSION OF THE `THINK TANK'

Jack Walton - Chairperson

I thought that what has just been said by Bob Meyenn and Robert Baker has been more useful to us than just summarising the conference proceedings. What they have done is concentrate on looking forwards rather than backwards. Perhaps you would now like to raise questions with either of the two speakers or make a statement.

Statement from the Floor

Mary Urch

I think perhaps the reason for the silence is just the fact that we feel, or certainly I feel, that they have said it all and said it extremely well. But can I just say that when I was preparing to come here and was trying to get a picture of what the current state of things was in Scotland, I approached the Scottish Council for Research & Education which is based in Edinburgh and which holds a data base of the kind that I felt David was describing earlier. What it gave me was a statement of people currently involved in the kind of research in which academics are normally engaged, the kind of research that Robert has just described very eloquently. What it did not give me was a picture of what I knew was going on all over the country. In every education authority there are people actively engaged in analysing, in discussing and devising policy as well as implementing it, and there was no immediate source for me to find out just what exactly was going on. So I am very pleased to hear about the diversity that Robert has described because I think that is absolutely essential.

Statement from the Floor

John Dingle

I would like to make one comment and that is Bob and Robert were, to me, leading in their papers towards the idea of a consortium. My feelings about the concept of a consortium was really something which I believe was included in the whole scope of the conference. I am just wondering whether everybody else feels the same - that everything we have been dealing and talking about here can be included under this consortium concept. I wonder whether all our concerns can be managed within such a consortium or whether any consortium which is formed should be more restrictive in its remit.

Bob Meyenn

I think the purpose of proposing that a consortium be established is to link up with a range of interests groups that are represented here into a network that will mean that we will be a lot better informed about what each other was doing. As Robert suggested we don't want to "stuff things up" by having such a narrow definition of research that most of the interesting material is left out.

I guess that another point is that we don't want the sort of research that some of us are involved in to be devalued because it can't be classified as pure academic research. I think that this is emphasised in that set of propositions which Robert Baker included on his overhead, particularly the statement that

diversity should be reflected in the mandate and the ownership of a consortium

and the materials which it produces.

Statement from the Floor

Andrew Higgins

I think that what we have in the overheads is part of a charter for a consortium. I am going to call the wording on the overheads motions and ask that the principles embodied in these overhead transparencies be accepted. (These are listed below and were seconded as motions).

PROPOSALS

That a consortium be established.

That the consortium have as a principal function the collection and dissemination of completed research, reports and work in progress on rural education. This data bank should be regularly updated.

That the consortium define its constituency as diverse. In doing so, the consortium explicitly recognises the stake and the role in research of groups such as those concerned with policy and administration. Community interest groups, parents, teachers, students, industry, rural service providers.

That research in rural education must be broad in its methodology and in its range of questions, issues and practices. Consequently a diverse range of research topics and activities is encompassed and encouraged. In turn, this diversity should be reflected in the mandate and the ownership of the consortium and the materials which it produces.

Statement from the Floor

Roy Lundin

Could I share a perception. This perception is that a consortium is a concept which would take us further forward than the point that we have reached at the end of this conference. I think the nature of the consortium will evolve as further discussions about its character take place. I think that the idea of a consortium is valuable and it is about as far as we can go at this moment.

Jack Walton

As it has been proposed and seconded that the principles embodied in the two overheads placed before us by Robert Baker and Bob Meyenn be accepted. Will all those in favour please raise their hands. I think it is unanimous No there is a query.

Statement from the Floor

Laurel Larocque

I think I would be concerned about a motion emerging from this conference stating that "we think a consortium should be established" perhaps what is needed now is to look into how we can best go about getting those areas which we have prioritised, researched and the concept of a

consortium explored. I would be quite concerned about being a party to a statement that said "we think a consortium should be established".

Jack Walton

Thank you. However we have now actually voted on a proposal that was proposed and seconded and I think we should stick by our decision.

Statement from the Floor

Andrew Higgins

Yes I think that is important. I think we have come to the end of a very important meeting and it is necessary that we summarise its essentials. The principle of a consortium has been suggested by Robert Baker and Bob Meyenn and these seem to be appropriate principles to drive such a consortium.

Statement from the Floor

Doug Lloyd

Unless I am mistaken I think that Bob Meyenn's overheads starts with "a consortium should be formed" and I would have thought that that was a starting point for the remainder of the considerations. I agree that there needs to be further consideration about the nature of the consortium but I definitely voted that a consortium be established.

Jack Walton

The position then, at the moment, is that we have voted that a consortium be established and that the outline characteristics of the consortium indicated by Robert Baker underpin the discussions about the nature of the consortium which is now our job to develop. What is really needed is some sort of steering committee now to proceed with the development task. Obviously such a steering committee should be representative of the various interests of the people here and also representative of the various States. Perhaps those people who would be willing to nominate themselves for the steering committee could give their names in to Sr. Miriam.

Proposal from the Floor

Ted Scott

Could I suggest that we resolve that the Rural Education Research & Development Centre be asked to take the initiative in moving towards the establishment of a consortium in keeping with the principles that we have just adopted. Someone has to be formally commissioned to do it and I suggest that is the way to move.

Jack Walton

Thank you Ted, have we a seconder. Any discussion? Well I will put that proposal before you. I see that the proposal is accepted. It will now be the task of the Centre to see that the steering committee gets under way. As I indicated, such a committee should be representative of both interests and States. The names given in to Sr. Miriam will be a good basis for selection. However, in order to ensure that the committee is truly representative it may be that not all the people who will give their names to Sr. Miriam at the end of this session will be members of this first steering

committee. If this is not the case it is because the aim is to make the Committee representative.

I think that everybody here has helped to ensure that this conference has been a success. We need to remember that this is not the end of our activities and efforts but the beginning. Steve, on the first day of this 'Think Tank' made the point that conferences are held to discuss vital issues but often nothing changes. He gave us the image of rural education research being like a chariot without wheels. The researchers were there, the areas to be researched were there, but there seemed to be no way forward. Well I hope this conference has put wheels on our particular chariot. We have some research directions. We have the will to proceed forward and the consortium is the vehicle to help us to do that. I think I should re-emphasise that as we bring this final session to a close there is no closure in what we are going to do as a body of people - researcher, administrators, community members - all with a common interest in rural education or education in rural areas, whatever the best description of our concerns may be. *

* I hope members of the Conference will forgive the insertion of this last paragraph. It was what I as Chairman meant to say but forgot! Thank you everybody for your valuable contributions.

RESEARCH PRIORITIES FOR THE IMMEDIATE FUTURE

Each Chairperson of a working group considered the statements relating to priority (urgent) research areas and rewrote them as research questions. They are listed below in no priority order. They represent the directions which the conference members felt that research in the field of rural education should take in the immediate future.

Schooling

- **What factors impinge upon the decision making of parents and students at critical decision making points of their schooling (e.g. at the end of year 7/8, 10 and 12) and what is their relevant significance?**
- **What implication for education provision and parental support emerged from this examination?**
- **What is the existing demand of people in rural areas for residential schooling?**
- **To what extent are these demands being met?**
- **What transitional problems do children from small rural schools meet when they become members of boarding schools?**
- **What attributes are necessary to ensure quality provision for residential schooling?**
- **What are the financial implications of residential schooling for rural children in view of present economic policy?**

Community

- **Where are the best examples (in Australia or overseas) of community schools? (i.e. schools which co-operate with their communities to provide and promote a range of educational and/or non-educational services and support for their communities)?**
- **What are the structures and processes that support successful community schools?**
- **What are the mechanisms that are most effective in developing community schools?**
- **What are the most appropriate considerations to be included in a set of guidelines for communities interested in establishing a community school?**
- **What support do communities need in order to more fully realise the potential of their local schools' community role?**
- **What beliefs, values and expectations about education and schooling are shared by parents in rural areas?**

- What are the expectations and realities of post-compulsory education in rural areas?

- How do people in rural communities perceive the role of the school principal, and to what extent does this correspond with the principals' own perceptions of their role?

- What roles should families in rural areas play in the education of their student children?

- What are the patterns of involvement of rural community members with education endeavour in their communities?

- To what extent are patterns of attainment of rural students and their progress through formal education avenues affected by the prevailing state of economic health of rural industries?

- To what extent is there a specifically "rural" factor influencing the "career paths" of rural students (i.e. distinct from the effects of factors such as gender, ethnicity, socio-economic status etc)?

- What differences exist in educational provision and opportunities for students with daily access to schools in rural towns (population 5,000 or more) and other more isolated rural students?

- What are the special needs of educational systems which deal with significant populations of Aboriginal and Islander people?

- What is the level of awareness amongst parents or guardians of rural students, and amongst adult learners of existing financial or other support systems designed to assist families or individuals in their educational programs? What are the factors affecting this level of awareness?

Educational Delivery

- Is there an appropriate non-urban curriculum different from a national (urban) curriculum?

- What are the educational implications of a) centralising b) de-centralising educational delivery?

- What are the attitudes and expectations of educational outcomes of all rural groups in terms of quality, quantity, resourcing and educational strengths?

Technology

- What are the implications for pedagogy, methodology and implementation of using various technologies for the delivery of education to rural and remote areas?

Studies to be conducted to answer this question should include the following elements

- a feasibility study of multi-media remote education solutions in terms of courseware development, equipment maintenance, in servicing of parents/tutors and students etc.

- the development of policies, models and strategies for re-training teachers, lecturers, parents and students and the ways teaching and learning can take place.

- a study of the process of introducing technology to education in rural areas and the issues relating to the co-ordinating such a process across groups and institutions.

- a study of the applicability and appropriateness of specific technologies for various learning styles, and the general adoption of technology as related to user friendliness of the systems.

- a study into the design of programs (courseware) that exploit the specific attributes of communication and information technologies, with particular emphasis on interaction as an element of learning.

Special Needs

- What are the destinations of students from the above groups, particularly secondary school students and young people leaving TAFE courses?

- What are the destinations of Aboriginal and Islander teacher preparation graduates? Why are they leaving the service and what can be done to retain them?

- The collection of data (qualitative and quantitative) and the conduct of longitudinal studies relating to rural women's educational training and re-training needs with a view to setting up models for use in other areas.

- In what way can the participation of rural school leavers in tertiary education be increased?

APPENDICES

`THINK TANK' RESEARCH INTO RURAL AREAS

VENUE
SHERATON BREAKWATER CASINO-HOTEL
TOWNSVILLE

SUNDAY, JUNE 10

12 noon -8.00pm	Registration - Sheraton Breakwater Casino-Hotel

MONDAY, JUNE 11

9.00-10.00am	Welcome to James Cook University Mr. John Williams - Deputy Chancellor
	Welcome to Townsville Alderman Tony Mooney Mayor of Townsville
	Opening of `Think Tank' Lady Logan MBE Appeal Committee Chairman
	Outline of `Think Tank' Proceedings Professor Jack Walton Director of Rural Education Research & Development Centre (RERDC)
	Chairman: Professor E. Scott
10.00-10.45am	`State of the Art' paper Mr. Steve Clark Visiting Research Fellow, RERDC.
	Chairman: Mr. S. Miller
10-45-11.15am	Morning Tea
11.15-12.45pm	Plenary Session Additional Papers
	Aboriginal & Torres Strait Islanders: Rural Concerns Ms Jeannie Herbert - Co-ordinator Aboriginal & Torres Strait Islanders Centre
	Women and Girls in Rural Australia Ms Lyndsay Connors Chair, Schools Council, NBEET, Canberra

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Communication Technology
Dr. Roy Lundin
Director, Centre for Interactive Technologies and Programs

The Rural Community
Mr. Don Squires, Charles Sturt University

Chairman: Dr. E. Willmot

12.45-2.00pm Lunch

2.00-3.00pm Panel relating to issues emerging from morning session -
Panel Members: S. Clark; J. Herbert; L. Connors; R. Lundin; D. Squires.

Chairman: Professor E. Scott

3.00-3.30pm Instruction to Working Groups
Professor J. Walton

3.30-4.00pm Afternoon Tea

4.00-5.00pm First Meeting of Working Groups

5.00-5.30pm Telecom's Involvement in Rural Education
Mr. Noel Ryan, General Manager, Telecom
Queensland Country Region

7.30pm Dinner

TUESDAY, JUNE 12

8.30-9.30am The National Examination of Country Areas Program -
Ms Laurel Larocque, Executive Officer,
Working Party on Rural Education and Training - NBEET

Chairman: Mrs. P. Mitchell

9.30-10.30am Second Meeting of Working Groups

10.30-11.00am Morning Tea

11.00-11.45am Plenary Session
Consideration of Initial Papers of Working Groups

Chairman: Dr. D. McSwan

11.45-12.30pm A Model for Remote Area Education
Professor Richard Smith, Department of Social & Cultural Studies,
James Cook University

Chairman: Mr. I. Crease

12.30-2.00pm Lunch

2.00-3.00pm	Education in Rural Areas of Scotland Ms Mary Urch, Northern College, Aberdeen Scotland Chairman: A/Professor I Birch
3.00-3.30pm	Afternoon Tea
3.30-5.00pm	Third Meeting of Working Groups
7.00-7.30pm	Pre Dinner Drinks
7.30pm	Conference Dinner After Dinner Speaker The Hon. Paul Braddy, Minister for Education, Queensland

WEDNESDAY, JUNE 13

9.00-10.00am	Final Considerations of Working Groups
10.00-10.45am	Plenary Session Assessment of Progress of Working Groups Chairman: Dr. M. Lally
10.45-11.15am	Morning Tea
11.15-12.00	Plenary Session Reflections on Rural Education/Education in Rural Areas Chairman: Mr. D. Griffith
12.00-12.45pm	Forum Observations from ICPA, SPERA, DEET and State Officers Chairman: Lady Logan
12.45-2.00pm	Lunch
2.00-3.00pm	Plenary Session Research Directions Chairman: Dr. D. McSwan
3.00-3.30pm	Afternoon Tea
3.30-4.00pm	Plenary Session Consortium and Journal? Consortium - Dr. David McSwan Journal - Mr. Ron Store, Senior Librarian, James Cook University Chairman: Professor E. Scott

4.30-5.30pm	Final Statement Dr. Robert Meyenn, Dean, School of Education, Charles Sturt University, Mitchell Dr. Robert Baker, University of New England Chairman: Professor J. Walton
7.30pm	Dinner

THURSDAY, JUNE 14

8.00-12 noon	Breakfast and Checkout

WORKING GROUPS

Appendix B

A B C D E

INTEREST GROUPS

Unlimited recommendations but justifications for recommendations

(I) 4.00-5.00pm Mon.
(II) 9.30-10.30am Tues

	Plenary session when chair-person of interest groups present recommendations	Chairperson Dr. D. McSwan

Recommendations presented to mixed groups for consideration.

A B C D E

MIXED GROUPS

1st Meeting	3.30-5.00pm Tuesday	Each group considers all recommendations and determine threshold.	
2nd Meeting	9.00-10.00 Wednesday	Thresholds for all five groups considered and modifications made.	
Time for possible modifications	10.00-10.45pm Wednesday	Plenary session when penultimate recommendations presented	Chairperson Dr. M. Lally
	11.15-12.00 Wednesday	Plenary session to consider semantic problems - Rural Education/Education in Rural Areas	Chairperson Mr. D. Griffith
	12.00-12.45pm Wednesday	Plenary session - observation from ICPA, SPERA, etc	Chairperson Lady Logan
	2.00-3.00pm Wednesday	Fiinal Plenary session	Chairperson Dr. D. McSwan

DISCUSSION PROCEDURE

There will be five working groups which will meet on four occasions. For the first two meetings the groups will be interest based, for the final two meetings they will be mixed. The chairperson of the interest based groups will continue as chairperson for the mixed groups as indicated below:

Meetings 1 & 2	Meetings 3 & 4	Chairperson
Schooling	Mixed	Jim Cameron
Communication Technology	Mixed	Roy Lundin
Educational Delivery	Mixed	Andrew Higgins
Community	Mixed	Don Squires
Special Needs	Mixed	Pauline Mageean

Working Groups' Objectives

The overall objects of the four working group meetings will be to isolate and prioritise the perceived important areas in which research should be undertaken. The two interest group meetings will give people the opportunity of grappling with areas of particular concern to them, the later two mixed groups will permit more of an overview of possible research directions to be taken. Discussion in these latter groups again should produce what for the group will be their final future research directions in priority order. During the various meetings of the working groups an overall concern should be kept in mind - the semantic difference between `Rural Education' and `Education in Rural Areas'. Some final statement relating to this semantic differentiations will be considered at the 11.15-12.00 noon plenary session on Wednesday.

Process

It will be important that the chairperson keep the groups to task. A rapporteur should be appointed by each group from within the group -

a) to record the main concerns relating to possible research areas.
b) to record the research areas that the group prioritises.

The rapporteur for the final two mixed meetings should be different from the rapporteur for the earlier meetings.

The record of the proceedings of the first two meetings should be made available in two forms, - main concerns in written form and presented to typist for typing, the priority research areas outlined on an OHP transparency. It is this latter which will be used by the rapporteur to present to the first plenary session. A similar process with different rapporteurs will be followed for the mixed groups. (A mini NGT process will be used to determine the final directions for future research - listed in priority order?)

All results of group proceedings together with the priority research directions will have been typed by the end of the `Think Tank'.

Nature of Existing Research

We must note that the `State of the Art' paper indicated:

a) research overlap;

b) lack of philosophical position underpining research or perhaps little real articulation of theory;

c) indiscriminate nature of research; and

d) basically no "real" research field.

Role of Chairperson of Working Groups

Not "laid back" but more of a guide and mentor - probably some 'agenda' for chairperson needs to be articulated. This agenda will be different in mixed groups as compared with interest groups.

Working Groups Chairperson

Interest Groups:

1) what are the the best examples of existing research (define best) from groups

2) what are the particular needs in the interests area that new research should address - from groups

3) are these new areas of research specific to a State or region or more general? from groups

4) what are the justifications for suggested research areas?

General Groups

1) distinguish the role of these working from previous working groups and advise the group that the task is to isolate really important areas of research irrespective of personal predilections (Chairperson statement)

2) what are these areas and justification?

3) of all the suggested areas of research what threshold should be drawn?

4) what research is it important to undertake in the next 3-5 years?

NB: Do not forget consideration of the semantics

RURAL EDUCATION - RESEARCH AND TEACHING ACTIVITIES IN WESTERN AUSTRALIA

THE RURAL EDUCATION RESEARCH UNIT AT THE UNIVERSITY OF WESTERN AUSTRALIA

The Centre for Research on Rural Education at the University of Western Australia has been established for a number of years and is actively involved in both research and teaching in areas related to rural education. The centre has a focus on the use of new information and telecommunication technologies for the provision of rural education although its research and teaching brief is wider than this. It has also been extensively involved in provision for rural aboriginal student populations. The Co-directors of the Centre are Assoc. Prof. Ian Birch and Dr. Mike Lally. Since 1987, the centre has received in excess of $300,000 in research funding from a variety of bodies including the Bernard Van Leer Foundation and the Australian Research Council.

RESEARCH

The Van Leer Foundation has been supporting a three year project which aims to develop and evaluate the use of computers and telecommunications in providing improved continuity in the early education (reading, writing and numeracy) of children of itinerant families. Within the project are children of families whose itinerancy is due to their work (mining and railways) or culture (aboriginal people). This project has developed a total of over 40 individual programmes in the areas of reading, writing and numeracy; all of which are linked to a management package which controls and monitors individual student progress. Individual records can be moved about the central data-base to reflect student itinerancy. This project is described in a forthcoming issue (1990 in press) of "Education".

A second research project is examining the retrieval and maintenance of Aboriginal languages. A computer-based learning package has been developed which allows aboriginal students to acquire the articulation skills of their tribal language without the need for a fluent speaker to be present. This package will later this year be evaluated in both traditional and school environments. One of the difficulties in teaching aboriginal languages to students is the lack of a fluent speaker in the community. This package overcomes that problem by digitizing (putting into a form which can be stored on a computer disk) a large sample of speech obtained from a native speaker. This speech is then used in the teaching procedure. For example, a student hears an utterance through headphones which are connected to the computer, they see on the computer screen either a picture and/or a written word describing the meaning of the utterance together with a wave form describing the utterance. The student then makes an attempt to copy the utterance by speaking into a microphone which is connected to the computer. The wave form of the child's utterance is then drawn below that of the fluent speaker and differences between the two can be observed. The student can then make another attempt in order to obtain a closer match between their own wave form and that of the fluent speaker. If the two wave forms have a similar shape, then there is a greater certainty that the utterance of the learner is a better approximation to that of the native speaker.

This research, while primarily directed towards aboriginal students, has other possible outcomes. These include, teaching language to deaf students and teaching languages other than English to students who by way of isolation have no access to a specialist language teacher (for

example, learning Japanese in a remote District High School).

The further grant is being used to investigate those factors which are involved in understanding why aboriginal students seem to relate well to computer-based learning materials. As part of this investigation, a computer-based version of the Distance Education Centre "Transition Science" curriculum materials has been developed. This version is based on Ministry documents but also includes a number of simulations, experiments, etc. and attempts to present science content in an interactive manner.

LIST OF PARTICIPANTS

Ms Mary Urch,
Northern College,
ABERDEEN,
Scotland.

Mrs. Jenny Delroy,
Executive Officer,
Rural & Provincial Policy Unit,
Corporate Policy Division,
Department of Primary Industries
& Energy
GPO Box 858,
CANBERRA, ACT 2600
PHONE - 06) 2724960

Ms Lyndsay Connors,
Chair,
Schools Council,
NBEET,
GPO Box 9880,
CANBERRA, ACT 2601
PHONE - 06) 2677351

Ms Laurel Larocque
Executive Officer,
Working Party - Rural Education
& Training
NBEET,
GPO Box 9880,
CANBERRA, ACT 2601
PHONE - 06) 276732

Dr. Eric Willmot,
Secretary,
ACT Department of Education,
PO Box 20,
CIVIC SQUARE, ACT 2608
PHONE - 06) 2469232

Dr. Jim Cameron,
Dean,
Faculty of Education,
Northern Territory University,
GPO Box 40146,
CASUARINA, N.T. 0811
PHONE - 089) 466165

Mr. Dennis Griffith,
Director, Planning & Co-ordination
Branch
Department of Education,
GPO Box 4821
DARWIN, N.T. 0801
PHONE - 089) 895611

Dr. Philippa Hudson,
Post Doctoral Research Fellow
North Australia Research Unit
A.N.U.,
PO Box 41321,
CASUARINA, N.T. 0811
PHONE - 089) 275688

A/Professor Ian Birch,
Assistant Professor in Education
Rural Education Research Unit,
University of Western Australia,
NEDLANDS, W.A. 6009
PHONE - 09) 3802398

Dr. Mike Lally,
Co-Director,
Rural Education Research Unit,
University of Western Australia,
NEDLANDS, W.A. 6009
PHONE -09) 3802389

Mr. Kerry Dohring,
Principal on Leave,
Ex Principal on Leave - Ex CAP
Co-ordinator,
PO Box 177,
TUMBY BAY, S.A. 5605
PHONE - 086) 884260

Ms Pauline Mageean,
Research & Development
Officer,
TAFE National Centre,
252 Kensington Road,
LEABROOK, S.A. 5068
PHONE - 08) 3327822

Mrs. Susan Stevenson,
President - SPERA Inc.,
Field Officer,
N.W. Council for Community
Education,
PO Box 1013,
DEVONPORT, TAS. 7310
PHONE - 004) 248005

Dr. Robert Baker,
Senior Lecturer,
Department of Social, Cultural
& Curriculum Studies,
University of New England,
ARMIDALE, NSW 2351
PHONE - 067) 732481

Mrs Marie Dale,
SPERA Inc.,
No. 7 Sanders Place,
GUNNEDAH, NSW 2380
PHONE - 067) 421435

Professor Bob Meyenn,
Dean, School of Teacher
Education,
Charles Sturt University,
Mitchell,
BATHURST, NSW. 2795
PHONE - 063) 332477

Professor Gordon MacLeod,
Dean, - School of Education,
University of New England,
Northern Rivers Campus
PO Box 157,
LISMORE, NSW 2480
PHONE - 066) 230603

Mr. Jack McFaul,
SPERA Inc.,
"Henkley",
CENTRAL TILBA NSW 2546
PHONE - 044) 737224

Mr. Roger Roberts,
Lecturer,
Faculty of Agriculture & Rural
Development,
University of Western Sydney,
Hawkesbury Campus,
RICHMOND, NSW. 2753
PHONE - 045) 701253

Mr. Don Squires,
Director, Centre for Research
& Training in Rural Education,
School of Teacher Education,
Charles Sturt University,
BATHURST, NSW. 2795
PHONE - 063) 332442

Ms Lorna Hawkey,
Field Officer-Country Education
Project - Gippsland Region,
PO Box 459,
BAIRNSDALE, VIC. 3875
PHONE - 051) 526155

Dr. Doug Lloyd,
Dean of Education,
Bendigo College of Advanced
Education,
PO Box 199,
BENDIGO, VIC. 3550
PHONE - 054) 447222

Mr. Ron Boxall,
Associate Director,
Special Program Services,
Department of Education,
PO Box 33,
NORTH QUAY, QLD. 4002
PHONE - 07) 2370826

Mr. Brian Cheers,
Lecturer,
Behavioural Sciences
James Cook University,
TOWNSVILLE, Q. 4811
PHONE 077) 814221

Mr. P. Chung,
Manager,
Customer Applications,
Marketing Branch,
Telecom Australia,
131 Barry Parade,
FORTITUDE VALLEY, Q. 4006
PHONE - 07) 8387274

Mr. John Cooney,
Assistant Regional Director,
Department of Education,
PO Box 5179 MC,
TOWNSVILLE, Q. 4810
PHONE - 077) 221100

A/Professor F. Crowther,
Ass. Dean of School of
Education,
University College of Southern
Qld.,
PO Darling Heights,
TOOWOOMBA, QLD. 4350
PHONE - 076) 312326

Mr. Fred Danielsen,
Headmaster, (AISQ Rep.,)
Cathedral School,
Ross River Road,
MUNDINGBURRA, Q. 4812
PHONE - 077) 752122

Ms Barbara Dean,
Co-Ordinator PCAP Central
Region,
PO Box 524,
ROCKHAMPTON, QLD. 4700
PHONE - 079) 272889

Mr. John Dingle,
Officer In Charge,
Academic Research &
Development Section
Gatton College,
University of Queensland,
LAWES, QLD. 4363
PHONE - 075) 620250

Ms. Jennifer Greaney,
Project Officer,
University College of Central
Qld.,
ROCKHAMPTON M.C. QLD
4702
PHONE - 079) 360467

Mr. Ron Henry,
Co-Ordinator P.C.A.P.,
Department of Education,
PO Box 33,
NORTH QUAY, QLD. 4002
PHONE - 07) 2370797

Ms Jeannie Herbert,
Co-Ordinator,
Aboriginal & Torres Strait
Islander
Education Centre,
C/- Garbutt State School,
PO Box 566,
GARBUTT, Q. 4814
PHONE - 077) 251662

Dr. Andrew Higgins,
Services Officer,
School of Distance Education -
Support Unit,
405 Montague Road,
WEST END, QLD. 4101
PHONE - 07) 8406743

Mr. Tom Johnson,
Co-Ordinator,
Non-Government
Disadvantaged Schools
Program
State Management PCAP,
SPERA Inc,
Qld Catholic Education
Commission,
GPO Box 2441,
BRISBANE, Q. 4001
PHONE - 07) 2243318

Mr. Warwick Jull,
N.Q. Regional Organsier,
Queensland Teachers Union,
MSO Box 5622,
TOWNSVILLE, Q. 4810
PHONE - 077) 714336

Mr. Steve Keating,
Senior Business Sales
Representative,
Telecom Australia,
PO Box 1533,
TOWNSVILLE, Q. 4810
PHONE - 077) 227317

Lady Pearl Logan,
Chairman - Appeal Committee,
`Richmond Downs'
RICHMOND, QLD. 4822
PHONE - 077) 413360

Dr. Roy Lundin,
Director,
Centre for Interactive
Technologies & Programs,
Queensland University of
Technology
Kelvin Grove Campus,

Locked Bag No. 2,
KELVIN GROVE, QLD 4059
PHONE - 07) 3528222

Ms Lorrie Maher,
N.C.I.S.A. Representative,
Association of Independent
Schools,
67 O'Connell Terrace,
BOWEN HILLS, Q. 4006
PHONE - 07) 8541757

Mr. Steve Miller,
Regional Director of Education,
Department of Education,
PO Box 5179 MC,
TOWNSVILLE, Q. 4810
PHONE - 077) 221100

Mr. Gerald Millichip,
Executive Officer,
Queensland Rural Training
Council,
GPO Box 2485,
BRISBANE, Q. 4001
PHONE - 07) 2213962

Mrs Patricia Mitchell,
Immediate Past President,
I.C.P.A., Federal Council,
32 Lukin Street,
CLAYFIELD, QLD. 4011
PHONE - 07) 2681087

Mrs. June Mary Mott,
Concerned member of rural
community
'Gladevale'
MAXWELTON, QLD. 4816
PHONE - 077) 418668

Mr. Howard Nielsen,
Education Consultant,
Team Consultancy Services,
Ministerial Consultative Council
on Curriculum,
PO Box 405,
NORTH QUAY, QLD. 4002
PHONE - 07) 2247653

Mrs Clair O'Brien,
Federal & State Council
Member,
I.C.P.A,
Craig's Pocket,
MT GARNETT, QLD. 4872
PHONE - 077) 885563

Rev. Roy O'Neill MSC,
Chairman, QCEC Remote &
Rural Education Committee,
Headmaster,
Downlands College,
PO Box 250,
TOOWOOMBA, QLD. 4350
PHONE - 076) 322855

Dr. Geoffrey Orr,
Lecturer - Education,
Griffith University,
NATHAN, Q. 4111
PHONE - 07) 8755658

Miss Catherine Roberts,
Technical Teacher,
Burdekin TAFE College,
Locked Bag 2,
HOME HILL, Q. 4806
PHONE - 077) 821088

Mr. Noel Ryan,
General Manager,
Queensland Country Division,
Telecom Australia,
GPO Box 2616,
BRISBANE, Q. 4001
PHONE - 07) 837 5353

Mr. Frank Sims,
Co-Ordinator PCAP Northern
Region,
Department of Education,
PO Box 5976,
CAIRNS, QLD. 4870
PHONE - 070) 523147

Br. Liam Regan CFC,
Assistant Director,
Catholic Education Office,
PO Box 861,
AITKENAVLE, Q. 4810
PHONE - 077) 752877

Mr. Tony Denyer,
Assistant Director,
Northern Regional

Development Office,
Stanley Street,
TOWNSVILLE, Q. 4810
PHONE - 077) 221149

Mrs. Heather Murray,
CWA Representative,
21 Alligator Creek Road,
MSO TOWNSVILLE 4810
PHONE - 077) 788132

Professor R. Smith,
Head of Department,
Social & Cultural Studies in
Education,
James Cook University,
TOWNSVILLE, Q. 4811
PHONE 077) 814656

Mr. Wally Richards,
Principal,
Blackheath & Thornburgh
College,
Kings Street,
CHARTERS TOWERS, Q. 4820
PHONE 077) 871644

Mrs Sue Whitehead,
PCAP-ICPA Representative,
"Cockenzie",
NEBO, Q. 4742
PHONE - 079) 505264

Mr. Col Sutcliffe,
District Inspector, Mt. Isa,
Department of Education,
PO Box 172,
MOUNT ISA, QLD. 4825
PHONE - 077) 436777

Emeritus Professor Jack Walton,
Director,
Rural Education Research &
Development Centre,
James Cook University,
TOWNSVILLE, Q. 4811.

Dr. David McSwan,
Deputy Director,
Rural Education Research &
Development Centre,
James Cook University,
TOWNSVILLE, Q. 4811

Mr. Ian Crease,
Department of Education,
Visiting Research Fellow,
Rural Education Research &
Development Centre,
James Cook University,
TOWNSVILLE, Q. 4811.

Mr. Steve Clark,
Department of Education,
Visiting Research Fellow,
Rural Education Research &
Development Centre,
James Cook University,
TOWNSVILLE, Q. 4811

Sr. Miriam McShane, R.S.M.
Qld Catholic Education
Commission,
Visiting Research Fellow,
Rural Education Research &
Development Centre,
James Cook University,
TOWNSVILLE, Q. 4811

Emeritus Professor Ted Scott,
Consultant,
Rural Education Reseach &
Development Centre
James Cook University,
TOWNSVILLE, Q. 4811

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